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**Report No. P-2914-KO**

REPORT AND RECOMMENDATION  
OF THE  
PRESIDENT OF THE  
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT  
TO THE  
EXECUTIVE DIRECTORS  
ON A  
PROPOSED FOURTH LOAN  
TO THE  
KOREA DEVELOPMENT BANK  
WITH THE GUARANTEE OF  
THE REPUBLIC OF KOREA

December 1, 1980

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### CURRENCY EQUIVALENTS

Prior to 1/12/80

From 1/12/80

Currency unit: Won

US\$1.00	=	W 485	W 580
US\$1 million	=	W 485 million	W 580 million
Won 1	=	US\$0.0021	US\$0.0017
Won 1 million	=	US\$2,062	US\$1,724
Won 1 billion	=	US\$2.06 million	US\$1.72 million

### ABBREVIATIONS

ADB	- Asian Development Bank
BOK	- Bank of Korea
CNB	- Citizens National Bank
DMB	- Deposit Money Bank
EPB	- Economic Planning Board
ERR	- Economic Rate of Return
Exim Bank	- Export Import Bank of Korea
FRR	- Financial Rate of Return
GNP	- Gross National Product
GRA	- Guarantee Release Arrangement
IFC	- International Finance Company
IFD	- Industrial Finance Debenture
IRF	- Industrial Rationalization Fund
KDB	- Korea Development Bank
KDFC	- Korea Development Finance Company
KECO	- Korea Electric Company
KfW	- Kreditanstalt fur Wiederaufbau
KFX	- Korea Foreign Exchange
KIST	- Korea Institute of Science and Technology
KLTCB	- Korea Long Term Credit Bank
MCI	- Ministry of Commerce and Industry
MOF	- Ministry of Finance
NIF	- National Investment Fund
POSCO	- Pohang Iron and Steel Company
SMIB	- Small and Medium Industry Bank
TDF	- Tourism Development Fund
TSD	- Time and Savings Deposits

### GOVERNMENT OF KOREA

#### FISCAL YEAR

January 1 - December 31

KOREAFOURTH KOREA DEVELOPMENT BANK PROJECTLoan and Project Summary

Borrower: Korea Development Bank (KDB)

Guarantor: Republic of Korea

Amount: \$100 million equivalent

Terms: The proposed loan will bear interest at 9.25% p.a., amortization to conform substantially to the aggregate of the amortization schedules applicable to the specific investment projects financed out of the proceeds of the proposed loan.

Relending terms: KDB will on-lend the proceeds of the loan to subborrowers at an interest rate two percentage points above the weighted average cost of foreign funds to KDB for a maximum period of 13 years, including 3 years of grace. Subborrowers will assume the foreign exchange risk.

Project description: The proposed project incorporates a package of financial sector policy measures which would be implemented by the Government, as a part of a comprehensive reform of the financial system of Korea. The proposed loan would be used to help cover the foreign exchange requirements of subprojects to be financed by KDB over the next two years. In order to encourage a reduction in KDB's reliance on long-term official borrowings, the proposed loan would incorporate a special amortization feature, which would permit the blending of Bank and commercial resources. There are no special risks associated with the project.

<u>Estimated disbursements:</u>	Bank FY:	1981	1982	1983	1984
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			(\$ million)		
	Annual	13.0	51.0	34.0	2.0
	Cumulative	13.0	64.0	98.0	100.0

Staff Appraisal Report: No. 3106-K0, dated November 20, 1980.



REPORT AND RECOMMENDATION OF THE PRESIDENT  
OF THE INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT  
TO THE EXECUTIVE DIRECTORS ON A PROPOSED FOURTH LOAN  
TO THE KOREA DEVELOPMENT BANK WITH THE GUARANTEE  
OF THE REPUBLIC OF KOREA

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1. I submit the following report and recommendation on a proposed fourth loan to the Korea Development Bank (KDB) with the guarantee of the Republic of Korea for the equivalent of \$100.0 million. The loan will bear interest at 9.25% p.a. and will be amortized substantially in accordance with the aggregate of the amortization schedules applicable to the specific investment projects financed out of its proceeds. The maximum repayment period applicable to subborrowers would be 13 years, including 3 years of grace.

PART I - THE ECONOMY

2. The latest Economic Report entitled "Korea: Current Developments and Policy Issues" was distributed under cover of SecM80-449, dated May 20, 1980. The Country Data Sheets are attached as Annex 1.

Past Performance and Emerging Structural Problems

3. During the last two decades, Korea achieved remarkable economic progress. At the beginning of the 1960s, the country was suffering from the typical vicious circle of poverty. GNP was about \$80 per capita and exports only \$41 million. During the following 17 years, 1962-78, real GNP grew by 9.4% p.a., exports by 40% p.a., and industrial production by about 20% p.a. In 1978, per capita GNP exceeded the thousand dollar mark, exports were above \$10 billion, the net foreign capital inflow was only about 15% of total imports, the rate of unemployment was down to 3.2% and the ratio of population below the poverty level was estimated to be under 15%.

4. Korea succeeded in achieving a high rate of growth between 1973 and 1978 despite a total dependency on imports for its petroleum needs and the quadrupling of oil import prices between 1972 and 1974. Korea's oil import bill grew to \$1.10 billion in 1974, absorbing 22% of export receipts. The terms of trade worsened by about 23% between 1972 and 1974 leading to slightly over 4% of GNP loss. In spite of this, Korea succeeded in maintaining a GNP growth rate of 8% in 1974 and about 10% p.a. during 1974-78. Notwithstanding the recession in developed countries and growing protectionism, Korea's exports in dollar terms grew by 38% in 1974 and by 32% p.a. during 1974-78. The ratio of foreign savings to GNP which rose to 12.4% in 1974 (from about 4% in 1973) declined to 3.3% in 1978. Throughout this period, the rate of unemployment continued to decline and the investment-income ratio during 1974-78 was higher (29%) than during the preceding five years (26%).

5. Among the policy instruments which contributed to Korea's success in very rapidly overcoming the effects of the first oil crisis were: (a) increased borrowing from abroad in order to maintain the momentum of growth; (b) devaluation in 1973 and 1974; (c) restraint in wage increases in 1974 and 1975 when real wages in mining and manufacturing increased by 5.1% p.a. and labor productivity by 10.5% p.a.; (d) an increase in government savings from 2.3% of GNP in 1974 to 6.5% of GNP in 1978; and (e) continued emphasis on export diversification in products as well as markets. In addition to these policy adjustments, the Korean economy also gained from (a) an improvement in terms of trade and (b) a spectacular growth in overseas construction contracts which stood at \$15 billion at the end of 1978 and yielded gross earnings of about \$2.2 billion.

6. However, the very success of the Korean planners in stimulating exports, investment and growth during 1975-78 seriously strained the economy. Between 1975 and 1978 the real domestic demand (consumption, investment and exports) expanded by an unprecedented 60%. Both the volume of exports and the level of real fixed investment doubled over these three years and purchasing power of exports improved as terms of trade showed a recovery of 28%. Such a rapid expansion in demand, along with multiplier effects understandably created bottlenecks in the economy and fuelled inflationary pressures. Labor markets witnessed a major transformation in this period. Non-agricultural employment expanded by 30% between 1975 and 1978, and employment in the critical construction sector increased by 55% during 1977 and 1978. Reflecting the tightening of the labor market, money wages in manufacturing increased by 33% p.a. during 1977-79 and real wages clearly outstripped the growth in productivity. The constraint on the supply of housing together with fast accelerating demand, led to very sharp increases in prices of dwellings. Structural factors such as shifts in the pattern of demand and bottlenecks in the supply of agricultural products such as meat and vegetables put further pressures on consumer prices. The sharp rise in Korea's price level compared with the major trading partners in turn eroded export competitiveness and led to a major deterioration in the balance of payments. Only a part of the widening of the current account deficit from \$1.1 billion in 1978 to \$4.2 billion in 1979 was attributable to an increase in the oil import bill. The basic underlying factors were the stagnation in the volume of exports and rapidly rising nonoil imports reflecting continuation of a major investment boom till the third quarter of 1979. Since early 1979, the Government has been concerned about the excessive investment and overheating of the economy and initially made efforts to reduce inflation through containing domestic expenditures. The April 1979 stabilization cum restructuring program focussed on tight monetary and fiscal policies. The growing weakness in the export demand and the sharp rise in oil prices were, however, not foreseen and thus the economy slowed down much more than expected, the inflation rates stayed high and the balance of payments emerged as a serious constraint.

7. The difficult economic situation prevailing in 1979 was further aggravated by the second oil crisis and the political problems emerging in 1979/80. As a result of the increase in the price of oil, Korea's annual

oil import bill rose from about \$3 billion in 1979 to about \$6 billion in 1980. The deterioration in the terms of trade amounted to a loss of GNP of about 4% between 1978 and 1980. Moreover, the oil price increase contributed to a slowing down of the growth rate of the industrialized countries and to an acceleration of their rates of inflation. The prospects for world trade in manufactures deteriorated and for an economy like Korea's, where growth has been led by exports, this amounted to a significant worsening of growth prospects. At the same time, the months between the October 1979 assassination of President Park and the inauguration of the present administration in September were marked by a high degree of political uncertainty and civil unrest.

8. Under the combined impact of the adverse economic and political events, the economy went into a recession: the seasonally adjusted GNP, as well as nonagricultural GDP, declined in each of the last three quarters of 1979. Notwithstanding the recessionary tendencies wholesale and consumer prices rose by over 18% during 1979, compared to 12-14% increase during 1978. The current account balance of payments deficit widened sharply from \$1.1 billion in 1978 to \$4.2 billion, or about 7% of GNP, in 1979. The nature of the current economic difficulties and some key policy issues were reviewed in the latest Bank economic report which concluded that in order to tackle the serious problems created by the past structural imbalances and the oil crisis, it would be necessary to adopt measures for a restructuring of the economy aimed at improving efficiency, controlling inflation and improving the balance of payments position. Among the needed measures that the report identified were: (a) a review of the investment pattern in the heavy industries sector, (b) restructuring agricultural income support programs, (c) improved energy efficiency through proper pricing as well as energy saving investments, and (d) reform of the financial system. As noted below, the Government has taken a series of measures in 1980 both to revitalize the economy and address the structural issues. In spite of these measures, however, it is expected that the rate of growth of GNP in 1980 will be negative (-2%), the rate of inflation (wholesale prices) about 40% and current account deficit about \$5.5 billion.

#### Policy Measures Taken in 1980

9. In its attempt to correct the emerging structural imbalances and to respond to the oil price hikes, the Government, initiated a series of policy actions in 1980, in three phases. At the beginning of the year, within the overall framework of a "stabilization first" policy, the Government introduced changes in the exchange rate, interest rates and energy prices in order to respond to the changing structure of international prices. In June, the Government moved to increase public expenditure and relax credit ceilings to tackle the growing problems of unemployment and declining industrial production. The third phase came a few weeks after the current administration took office in September 1980 and was characterized by a more active program for the revitalization of the economy through promotion of exports and of construction industry and consolidation of the heavy industries sector through mergers. Prospects for the effective implementation of this program are heightened by the fact that the new Government includes a number of highly experienced and competent

individuals. The Prime Minister served in key Cabinet positions during most of the 1970s and is identified with the formulation and application of the imaginative and bold policies which enabled Korea to surmount the difficulties posed by the first oil crisis of 1974/75. Some details of the measures adopted during these three phases are noted below.

10. Exchange Rates, Interest Rates and Energy Prices. In January 1980, the won was devalued by about 20% from W 484 to W 580 per US\$1. This was followed in February by a new exchange rate system under which the value of the won would be determined on the basis of a basket of currencies (consisting of SDR and a sub-basket of currencies reflecting the shares of the countries in Korea's merchandise trade) although other factors such as relative price movements could also be taken into account. The new system has given flexibility to Korea's exchange rate and the dollar value of the won has declined by about 10% since February 1980. In January 1980, interest rates were also raised by about 6 percentage points for most lending and deposit rates. Subsequently there have been some minor downward adjustments in interest rates; however, at present, the prime lending rate stands at about 21 percent, which is higher than the expected rate of inflation for the year ahead. In response to rapidly rising oil import prices, the Government had already raised domestic oil prices by about 75% in 1979. In January 1980 the prices were raised again by about 60%, bringing the total increase in one year to over 170%.

11. Demand Management. At the beginning of 1980, the Government was pursuing an extremely tight monetary policy. In spite of the substantial increase in domestic prices, due to the energy price increases and devaluation, the rate of growth of money supply (M2) was to be kept at the target of 20% in 1980. In order to restrain the budget deficit, Government expenditures were to be cut back, with principal emphasis on reducing expenditures with a low employment impact or high fuel or import intensity. However, by mid-year, concerned at the rising unemployment and declining industrial production, the Government eased the monetary and fiscal squeeze. In response to the Bank's suggestions for flexible monetary policy and in agreement with the IMF, the target growth rate of M2 for 1980 was raised to 25%. W 112.7 billion of budget expenditures frozen earlier was made available for public works programs and additional credit were made available for small and medium industries and for construction of housing units, particularly for low income families. Further incentives for residential construction were given in September by reducing the rate of capital gains tax on real estate transfer (from 50-80% to 35-75%), and increased funds were made available to Korea Housing Bank and the Korea Land Development Corporation. To promote exports, loans per dollar of letter of credit for exports were increased and the banks were asked to pool resources for providing performance guarantees requested by domestic companies for overseas construction contracts, and for helping exports of heavy and chemical industries on a deferred payment basis.

12. Protecting Livelihood of the Poor. Throughout the year, with growing unemployment and rising prices, the Government has adopted various measures to alleviate the economic strain on the poor. Among these measures were: expansion of public works programs; various subsidy schemes on



essential goods and services such as rice, coal briquettes and bus service; program for increasing imports of major grains and giving tariff reductions on some essential commodities; and increase in interest rates on special savings programs for low income families.

13. Industrial Rationalization Program. The new administration has moved to tackle the very difficult issues arising from recent excessive investment in some heavy industries. It has issued instructions for consolidation in six industries, namely, automobiles, power generation equipment, copper smelting, heavy electrical equipment, electronic switching systems, and marine diesel engines. Since all these operations are privately-owned, the Government instructions for mergers will involve complicated changes in ownership, licensing arrangements, contractual relationships and management patterns. In a move to encourage greater equity financing, the Government will disallow the treatment of interest payments as expenses in the calculation of tax liability for firms which are already too heavily leveraged. The larger companies will be required to register all land owned and the land found unnecessary by the Government for the companies' operations will have to be sold and the proceeds of these sales used for improving debt equity ratios of these firms.

14. Expansion of Social Development Expenditure. The new administration proposes to expand rapidly expenditures in the areas of education, housing, health and social welfare. It has announced a large increase in enrollment quotas for higher education, reform of the private tutoring system, and an expansion of the medical insurance program.

15. The Government is in the process of formulating the next Five Year Plan which will cover the years 1982-86.<sup>/1</sup> The objectives of the plan are restoration of growth momentum along with equity through employment generation and increased social development expenditures. The general strategy is to increase efficiency of resource use by opening up the economy to greater international competition, by liberalization of the financial system and by promotion of the competitive system in domestic production and marketing. The emphasis on heavy and chemical industries would continue but will be combined with efforts at consolidation of the industrial structure and promotion of science and technology. Energy conservation and substitution for oil will receive major attention. The income support program for the poor (including rural income support program) would gradually shift from generalized subsidy programs to targetted investment and income transfer programs. There would be greater efforts than in earlier plans on reducing regional imbalances, meeting basic needs, tackling urban problems such as housing, transport and water supply and environmental pollution and development of a social security system.

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<sup>/1</sup> The Bank is the executing agency for a UNDP-financed program for assistance to the Fifth Plan formulation. This assistance involves mobilizing some 30 foreign consultants to advise on some selected aspects of the Plan and organizing training programs for Koreans at selected institutions abroad.

### External Capital Requirements

16. At a recently held meeting of the Consultative Group for Korea, there was a consensus that in spite of the current difficulties, Korea's longer term prospects remain good. Among the sources of strengths for the economy are: a large investment base, the young and rapidly growing labour force, the scope for exports of capital goods including construction equipment, and, above all, the skill and dedication of its labour force, the dynamism of its private sector. It is generally recognised, however, that even with strenuous Government efforts for structural adjustment, Korea's balance of payments can improve only over a period of several years. The current account deficit in balance of payments is expected to remain about \$5 billion per year during the next few years. Allowing for debt service and addition to reserves, the gross external capital inflows required during 1980-81 are estimated to be about \$7.5 billion per year, of which about \$1.3 billion could be expected from public sources (excluding Ex-Im banks but including IMF), and the rest from private sources.

17 While Korea is extending its use of commercial financing from traditional suppliers and private bank credits to Euro-dollar syndicated loans and bond issues in the Euro-bond and Asian bond market and is expected to derive an increasing proportion of its total requirements from such sources, the magnitude of these external capital requirements is such that it will have to continue to rely on considerable capital inflows from official sources. It should, however, be emphasized that the higher anticipated levels of external capital inflow (relative to the Fourth Plan targets) are a consequence of its higher investment rates rather than a shortfall in the domestic savings rate. The ratio of foreign savings to GNP is expected to decline in the eighties, following the restructuring and readjustment planned for the next few years. Servicing of the debt should not pose difficulties given the present debt service ratio and the continuing emphasis on export growth, provided that the proportion of external debt incurred on shorter term and at high interest rates is not excessive. The projected ratio of debt service payments to total export earnings is expected to remain below 16% throughout the eighties.

### PART II - BANK GROUP OPERATIONS

18. As of July 31, 1980, Korea had received 52 Bank Loans (including one Third Window Loan) and 8 IDA Credits, totalling \$2,945.2 million in loans and \$106.8 million in credits (taking into account cancellations and the refinancing of one IDA Credit in a subsequent Bank Loan). As of that date, \$976.0 million of the total Bank lending remained undisbursed on effective Loans and Credits, mostly from commitments in the past two years. Annex II contains a summary statement of Bank Loans, IDA Credits, and IFC Investments as of that date and notes on the execution of ongoing projects. As indicated in the notes, progress on project implementation is generally satisfactory.

19. In recent years, the thrust of the Bank Group's lending operations in Korea has been directed towards assisting the Government's efforts: (a) to secure the external resources required to supplement domestic savings in sustaining a high GNP growth rate by following a policy of rapid export-oriented industrialization; (b) to avoid the emergence of infrastructure bottlenecks; and (c) to complement industrial development with agricultural and rural development schemes aimed at bringing about a better dispersal of the fruits of growth through raising incomes and improving the quality of life in the rural areas.

20. A substantial part of Bank financing has been directed towards the vital industrial sector through lending to Korea's four major development banks. The Korea Long-Term Credit Bank (KLTCB) <sup>/1</sup> has received \$320.0 million, the Korea Development Bank (KDB) \$252.5 million, the Small and Medium Industry Bank (SMIB) \$145 million in Bank loans for relending to private industry and the Citizens National Bank (CNB) \$30 million to meet the financial needs of the small enterprises. The primary beneficiaries of these loans have been the numerous industrial enterprises which have received funds through the financial intermediaries. This has resulted in the overall development of the industrial sector, and also contributed to the achievement of institutional improvements as well as the Government's objective of decentralizing industry.

21. As Korea's economy continued to grow and the pace of industrialization has quickened, there has had to be a parallel expansion of transport facilities. The Bank Group, through its association with the Government's efforts to modernize and expand the transport sector dating back to 1962, has played an important role in these developments. In addition to the recently approved loan of \$94 million for the seventh railway project, some \$340 million had been provided for six railway projects designed to increase the railroad's capacity and improve its operations; four loans totalling \$334.5 million have been made for highway construction and paving of high priority sections of the national network and for a countrywide maintenance organization; and two loans amounting to \$147 million have been provided for the expansion of port facilities at Busan and Mugho.

22. Korea's paucity of natural resources and dependence on the manufacturing segment of its economy have resulted in the adoption of a strategy based on maximizing the advantages of a skilled and hardworking labor force. The Bank Group has been involved in helping to meet the requirements for appropriately trained workers and certain categories of skilled manpower through its lending for four education projects, which have pursued the broad objectives of technical manpower development either through the expansion of relevant subsectors or through specific quality improvements. Together, these projects have catered to a wide range of manpower training needs.

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<sup>/1</sup> Previously called the Korea Development Finance Corporation (KDFC).

23. Korea's record of achievement in modernizing its agricultural sector, although less spectacular than the gains made in the industrial sphere, is nevertheless commendable. The past 15 years have seen agricultural output grow at about 4% per annum, which has resulted in the country's becoming near self-sufficient in its staple food, rice, and made possible a steady and perceptible improvement in the living standards of the 40% of Korea's population who live in the countryside and rely primarily on agrarian pursuits for their livelihood. The Bank has lent \$325.5 million for the improvement of irrigation facilities, land and seed development and the provision of agricultural credit to farmers and processors of agricultural products. In addition, \$155 million has been provided for two rural infrastructure projects in support of the Government's rural development program, initiated in 1971, to improve the quality of life and the standard of living in the rural areas. Recently a \$125 million loan was provided by the Bank to help meet the growing demand for municipal, industrial and irrigation water in the Han Basin southeast of the capital city, Seoul; reduce flood damage; and generate electricity to augment and provide peaking capacity for Korea's power system.

24. The Bank's first essay into the field of regional development in Korea, through the project approved in January 1975 (Loan 1070-K0), has proved successful. The project was designed to support the Government's policy by financing high priority investments in the poor, primarily agricultural, southwest region. A loan of \$65 million for a second project for the development of the region was approved by the Executive Directors in September 1979.

25. Excluding one project that was cancelled subsequently, IFC had, by July 31, 1980, entered into 28 commitments, totalling \$67.9 million (net of participations and cancellations). Korea's industrial development programs have required large capital expenditures in the private sector, a situation which has enabled a substantially enhanced IFC presence in the past few years.

26. A primary objective of the Bank's future lending to Korea is to provide assistance in sustaining the growth momentum and in addressing the emerging issues which the Korean economy is facing. The maturity of many of the Korean institutions suggests that it would be appropriate to adopt a sector lending approach in some areas along the lines of the recently approved loan for higher technical education which will contribute to the modernization and improvement of the system of higher technical education so as to increase its flexibility and responsiveness to the changing requirements of the economy.

27. Another strand in the lending strategy is increased support of the Government's efforts to spread the fruits of growth even more equitably by the diversification and expansion of the output of the agricultural sector and through nationwide development programs. To support such diversification and expansion, projects are envisaged for land/water resource development, for

agricultural credit and marketing, for low-income housing, and for the further development of rural infrastructure and facilities in selected provincial areas, which would enhance incomes and quality of life in the lesser developed regions of the country and would have a significant impact on the problems of migration to the major metropolitan areas.

28. The further development of the industrial and agricultural sectors and the anticipated growth of exports will require concurrent infrastructural development. Although the transport sector will be given less emphasis than in the past, the investments required are large and, thus, there is considerable support for this sector in the proposed lending program.

29. The share of the Bank Group in Korea's total external debt disbursed and outstanding at the end of 1979 was about 13%, and its share of debt service was of the order of 5% at that time. These ratios are expected to be around 8% and 6% respectively, by the mid-eighties.

### PART III - THE INDUSTRIAL AND FINANCIAL SECTORS

#### The Industrial Sector

30. Korea's growth strategy has been based on the expansion of industrial activity with emphasis on the promotion of manufactured exports. Rapid growth in GNP at about 10% p.a. in real terms during the last two decades has induced considerable structural change in the economy. The growth of the manufacturing sector, at 18% p.a. over the period 1962-79, has transformed a predominantly agricultural economy into one in which mining and manufacturing play an important role and account for 34% of GNP.

31. In the early 1960s, Korea's exports were insignificant. In 1965, commodity exports totalled \$181 million, of which manufactures accounted for just over half. By 1979, commodity exports reached \$15.1 billion; 90% of these consisted of manufactures representing 27% of manufacturing output. Although Korea's export pattern continued to display a high degree of reliance on a few labor-intensive traditional exports (textiles, clothing, footwear, plywood and certain miscellaneous manufactures), there has also been a discernible movement in the direction of more sophisticated skill-intensive products. Items such as electrical machinery, machine tools, electronic goods and components, and transport equipment (including ships), have been added to Korea's range of exports. At the same time, the pursuit of backward linkages, usually from export products, has enabled domestic production to replace imports in certain sectors, e.g., textiles, apparel, sewing machines, certain metal products and chemicals, and in particular segments of the basic metal, petrochemical and machinery industries.

32. Several factors have contributed to the remarkable performance of the export-oriented industrial sector. They include: efficiency of factor use (labor and capital) in manufacturing; heavy investment outlays in industry with an average real growth rate of about 15% p.a. during the last decade; rapid and steady increases in productivity levels; and the combination of flexible exchange rate and export incentives which maintained the profitability of Korean exports in the face of relatively high rates of domestic inflation.

33. Korea's economy began to show definite signs of overheating in 1978. Manufacturing investment, which had been increasing at a rate of 13.3% in real terms over 1975-77, accelerated sharply by 63.4% in 1978. With hindsight it may be averred that the growth of manufacturing investment was too rapid and concentrated excessively in capital-intensive industries (such as heavy machinery and petrochemicals) resulting in a steep rise in capital intensity of output as well as increased inflationary pressures in 1978-79. The manufacturing growth rate of 10.6% in 1979 was about half that in 1978. The Government's expectation that the GNP growth rate will be negative in 1980 implies that the rate of growth of manufacturing output has been even more sluggish in the first half of this year. The Government believes that a number of structural factors affecting the industrial sector have contributed to the slowdown. For instance, overcapacity is now apparent in some branches of heavy industry and real wage increases have outstripped productivity gains since the mid-seventies and caused an erosion of Korea's comparative advantage in labor-intensive manufactured exports. The Government has begun to formulate a structural adjustment program, one of the main objectives of which will be to enable the industrial sector to continue in its role as the major source of growth. The Bank has been consulted on this effort and has under review the Government's request for a series of structural adjustment loans. The Government's plans to rationalize the structure of heavy industry by promoting mergers of some of the firms involved and to concentrate more heavily on the promotion of skill-intensive industries such as engineering and electronics appear to be steps in the right direction. Korea's well-trained labor force, the excellent record of its economic management in adapting to changing circumstances, and the foothold it has secured in growing markets such as the Middle East, augur well for its industrial sector regaining its dynamism.

#### The Financial Sector

34. Korea's financial system and institutions have expanded rapidly in step with the growth of the industrial sector: the consolidated assets of the financial sector have increased by 13.8% p.a. in real terms over 1975-79 compared to a GNP growth of 11% p.a. Lending for industry has kept pace with the heavy investment needs of the sector: manufacturing fixed investment increased by an average of 45% p.a. in current prices over 1977-79 while the increase in term lending (i.e. loans with a maturity exceeding one year)

averaged 52% p.a. It is estimated that approximately 50% of manufacturing fixed investment in 1979 was supplied by Korean financial institutions while self-financing accounted for 30% and other sources of funds, including direct overseas borrowings, accounted for the remaining 20%.

35. The Korean financial system is highly specialized. It comprises: (a) banking institutions which along with the (central) Bank of Korea (BOK), form the monetary system; and (b) nonbank institutions which do not take deposits from the general public. Banking institutions comprise mainly the commercial banks and a number of specialized banks which mobilize and allocate funds to specific sectors of the economy (e.g., small-scale industry and agriculture). The commercial banks are the main source of short- and medium-term working capital for industry; the specialized banks are the major purveyors of longer-term capital. The Bank has lent to two major specialized banks dealing with smaller enterprises: SMIB and CNB. Together with the BOK, banking institutions accounted for 73.8% of the financial sector's assets in 1979. Nonbank financial institutions perform a more specialized function of allocating resources, mainly long-term, to particular sectors/branches of the economy and of mobilizing specific types of resources (e.g. insurance and short term finance companies). KDB and KLTCB have been the two main nonbank financial institutions meeting the long-term financing needs of industry. At end 1979, they jointly accounted for 56% of the total assets of nonbank financial institutions. They have played a major role in the transfer of World Bank resources to industry.

36. Over the past twenty years, the financial system has played a crucial role in Korea by providing the financial support necessary to implement the Government's economic development strategy. The Government has effectively used the financial system as a tool to implement its investment decisions in both the public and private sectors. The financial system has served Korea well in the past decade and a half during which its development strategy has centered around the achievement of rapid rates of the growth of manufactured output principally for export. The country's financial mechanism which is characterized by a high degree of responsiveness to the Government's priorities, has clearly played a major role in helping the manufacturing sector to act as the major engine of growth. For instance, the operation of the export credit system has been a vital ingredient of the phenomenal export growth which has provided the foundation for the enormous expansion of the economy since the mid-60s. The substantial degree of Government control over the system has, however, contributed towards the creation of one of the major problems with which Korea is now faced with - i.e., over investment in certain segments of the manufacturing sector. In the latter half of the 70s, the Government placed increasing emphasis in the development of heavy manufacturing and chemical industries. At that time, it was believed that Korea's comparative advantage would lie in these fields. Accordingly, the Government used the financial system to funnel resources towards the new heavy and chemical industries which were highly capital-intensive. The main instrument used by the Government to effect this strategy was the National Investment

Fund (cf. para. 37 below). It is now evident that this policy culminated in substantial over-investment in the heavy and chemical industries to the detriment of Korea's prospects for continuing the economic success of the past (cf. para. 33 above).

37. The Government fully owns or holds controlling participations in the share capital of the major financial institutions including commercial banks, specialized banks and KDB. It also effectively controls the mobilization and allocation of resources by the financial system primarily by: (a) administering the interest rate structure and the yields on deposits and other instruments of resource mobilization; and (b) providing the financial institutions with resources in the shape of funds earmarked for specified purposes, e.g., in the case of monies originating from the National Investment Fund (NIF) the Government stipulates the particular sectors or subsectors (and, at times the individual firms) towards which these should be directed. This "directed lending" system, which accounts for approximately 40% of total institutional lending, is administered through guidelines and directives issued by the Ministry of Finance (MOF) and the BOK. The system circumscribes the discretion exercised by financial institutions in their allocation of funds. At least half of the directed loans are made at rates of interest which are at levels below the market rate. Short-term export credits and the NIF program are the main components of the system of subsidized lending. The commercial banks are the main source of export credits while nearly two-thirds of NIF loans to industry are channeled through KDB.

38. Since its establishment in 1974, the NIF has gradually evolved into a major source of long-term funds for the priority sectors of industry. Total NIF loans outstanding reached \$2.5 billion at end-1979, accounting for 30.5% of all outstanding term loans by KDB and banking institutions. NIF resources are mobilized primarily through compulsory contributions by banking institutions out of their deposit resources. NIF loans are aimed primarily at restructuring and deepening the industrial sector; emphasis has been placed on assisting heavy and chemical industries and a substantial part has been allocated to power projects. NIF lending is presently handled by the commercial banks, the specialized banks and KDB with respective shares in outstanding NIF loans of 18%, 16% and 66% at the end of 1979.

39. The growth and development of the Korean financial system has undoubtedly contributed to the country's economic success. However, the rigidity of the directed lending system could well hamper it in responding appropriately to the increasing complexity and sophistication of the Korean economy. The Bank's most recent economic report concluded that the restoration of high economic growth in the 1980s is contingent upon a number of structural adjustments in the economy. These include streamlining the financial system and the reshaping of those segments of the industrial sector in which overinvestment and inefficiencies have surfaced. The Government has begun to address the basic issues of industrial investment and financial



policies (cf. para. 33 above). It has announced its intention of effecting a comprehensive reform of the financial system over the next few years with emphasis on a liberalization of the operations of intermediaries, particularly the commercial banks. A first step in this direction was taken in November 1979, with the enactment of the Long-Term Credit Bank Law which enables the establishment of privately owned financial intermediaries specializing in term lending and authorized to raise funds from the domestic market. KLTCB became Korea's first long-term credit Bank in June 1980. Further, the Government instituted a reform of the interest rate structure in January 1980. This move was in keeping with the Government's overall policy of bringing interest rates to a positive level in real terms.

40. In late 1979, the Government requested the Bank to undertake a review of the Korean financial system and prepare recommendations on appropriate policy measures aimed at increasing its efficiency. This review was completed in mid-1980 and the Government is in general agreement with the analysis and conclusions. One of the major findings was that the control exercised by the Government on individual financial institutions and on fund allocation was too rigid and constrained their operational autonomy and investment decision-making capability. For example, the Government specifies interest rates which individual institutions can charge. One result has been that interest spreads on money raised through the sale of KDB's industrial finance debentures have in many cases been negative. This and other anomalies arising from Government control over interest rate spreads, as well as measures which have been agreed to deal with them, are further detailed in paras. 46 and 47 below.

41. Interest rate subsidies have had a number of negative effects. Firstly, access to cheap credit has resulted in project sponsors limiting their equity contributions to individual schemes and thus helping to cause the high level of indebtedness which characterizes Korea's corporate sector rendering numerous firms financially fragile. The increased vulnerability of the typical Korean enterprise can be gauged by the fact that average debt equity ratios rose from 2.7:1 in 1973 to 3.6:1 in 1978. Secondly, they have contributed to overinvestment in certain areas of manufacturing (see discussion in paras. 33 and 36 above). Another recommendation flowing from the financial sector review was that direct government intervention in allocative decisions be reduced and that the availability of "subsidized/directed" credit be confined to clearly defined priority areas of the industrial sector; to this end, the NIF program (para. 38) should be scaled down and fund allocation should be rationalized. The other source of subsidized funds, the short-term export credit program, has also had too broad a focus and would need to be reassessed in the context of Korea's overall export promotion strategy (cf. para. 48 below). Also, the mobilization of domestic currency resources by financial institutions should be encouraged through the maintenance of interest rates at positive real levels. Other major recommendations relate to granting commercial banks greater autonomy in their operation, placing more stress on term

transformation of deposits and the internationalization of Korea's capital markets. Understandings reached between the Bank and the Government on these recommendations are discussed in paras.45-48.

#### The Bank's Role in Korea's Financial Sector

42. Four development finance institutions operate in the industrial sector. The government-owned CNB and SMIB specialize in assisting the smaller end of the industrial spectrum. Larger enterprises, with employment exceeding 300 persons and assets of more than W 500 million (\$860,000) are eligible for long-term financial support from KDB. The privately owned KLTCB has also concentrated on assisting relatively large firms; unlike KDB, however, it was not precluded from financing smaller borrowers and has done so in a few instances. The Bank has made loans to all four development finance institutions which, in aggregate, supplied over 50% of all loans with a maturity of more than one year to the manufacturing sector in 1977-78. Bank lending to smaller scale industries through SMIB and CNB was initiated in 1975 and 1980, respectively. Lending to larger-scale firms started in 1967 with the first Bank loan to KLTCB. KDB became a Bank borrower in 1975. Seven Bank loans aggregating \$320 million have been made to KLTCB and three loans for a total of \$252.5 million to KDB. Through its support of KDB and KLTCB, the Bank has made a significant contribution to the growth of industry in Korea and to the development of the financial system. All these projects have been implemented well and have contributed to the growth of the development banks into capable and mature institutions.

43. The proposed operation is aimed at transcending the two major objectives of the Bank's past lending to financial intermediaries in Korea - resource-transfer and institution building. Simultaneous negotiation of the KDB IV and KLTCB projects afforded the Bank an opportunity to reach a common understanding with the Government regarding Korea's long-term strategy for improving efficiency in the financial sector. The understandings reached include a series of policy measures which are described in the paragraphs below.

44. The system of government-directed lending through NIF will be reorganized and rationalized. The Government intends to thoroughly examine and evaluate the NIF program. It intends to carry out no later than December 31, 1981, detailed industrial sector and subsector studies aimed at defining priority areas for NIF lending. The Government will consult with the Bank on the study's terms of reference and recommendations. The Government intends to cease providing NIF resources to Korean commercial banks which lack the requisite appraisal and implementation capacity to ensure efficient use of these funds. The Government has agreed to furnish by December 31, 1981 a time-phased plan to achieve this objective by the end of 1984. KDB will also establish within its present organizational set-up a special unit to monitor the performance of NIF borrowers and to help conduct the NIF

study. The understanding reached on these matters are spelt out in Sections 3.03(a) and (b) of the Loan Agreement and in a Supplemental Letter to the Guarantee Agreement entitled "Financial Sector Policy Improvements." These measures are expected to increase the autonomy of the commercial banks in making investment decisions and to enable the Government and KDB to implement a more limited and sharply focused NIF program.

45. Increased mobilization of long-term domestic currency resources by financial intermediaries, including KDB and KLTCB, is to be encouraged. At present the cost of issuing term debentures is too high to allow onlending with a sufficient positive interest spread. It was agreed that the lending rate for loans funded with such resources would be set at such a level so as to allow a positive spread (Section 3.04 of the Guarantee Agreement). This measure is expected to enhance the resource mobilization capability of financial institutions and the development of the capital markets in Korea. The Bank loan to KLTCB would support this institution during the time when it will be initiating efforts to mobilize domestic resources and to expand its local currency lending.

46. Government policy regarding foreign exchange financing through the specialized and development banks, to date, has required that foreign loans from official sources to these intermediaries be onlent at a uniform spread of 2%. Given the substantially divergent terms of foreign borrowings from different sources, the result is that various subborrowers, from the same institutions at the same time, ostensibly similar in essential characteristics, obtain funds on different terms - albeit all more favorable (exchange risk aside) than those for nonconcessional domestic credits. It was agreed during negotiations that the lending rate applicable to foreign currency loans funded with official borrowings would be rationalized by imposing a 2% interest spread over the weighted average cost of official resources available to KDB and KLTCB for future lending (Schedule 3 to the Loan Agreement). This formula is expected to remedy the inconsistencies in lending rates which prevail at present. Concurrently, the interest spread currently authorized by the Government for onlending foreign commercial resources which is much lower than 2% and is insufficient to cover handling costs would also be the (2%) level allowed for foreign official borrowings. This harmonization of interest spreads is expected to increase the incentive for mobilization of foreign commercial borrowings.

47. The availability of cheap subsidized credit has encouraged a high dependence of Korean industries on debt financing which has resulted in a high indebtedness of the corporate sector and a fragile financial structure (cf. para. 40 above). In order to alleviate this problem and increase the capitalization of industry, it was agreed during negotiations to limit access to Bank funds to subborrowers with debt/equity ratios not in excess of 5:1 (Schedule 3 of the draft Loan Agreement).

48. Additional studies and analyses of selected financial sector issues will also need to be carried out so as to form the basis of a continuing dialogue on financial policies. The Government has agreed to conduct a series of studies covering the following topics: (a) the short-term export credit system in the context of Korea's export promotion strategy; (b) the future role of commercial banks in the financial system, which envisages allowing them increased autonomy in their operation and stresses term transformation of deposits; and (c) the internationalization of Korea's capital markets. Draft terms of reference for the studies are to be prepared and submitted to the Bank for comments by June 30, 1981 (Supplemental Letter to the Guarantee Agreement).

#### PART IV - THE PROJECT

##### Background and Project Objectives

49. In addition to providing a framework for reaching understandings with the Government on the financial sector issues described in Part III, the proposed loan would supply a part of the long-term funds required to meet the needs of KDB's borrowers. Korea's increasing production costs relative to its competitors have induced the Government to promote a restructuring of the industrial sector towards skill and technology intensive industries. This type of investment usually has a rather long gestation period and requires long-term financing which cannot be obtained from commercial sources. The institutional aspects of the project were appraised in February 1979. In April 1979, a Bank mission discussed with the Government the sectoral context and financial policy measures which form an integral part of the proposed project.

50. A Report entitled "Staff Appraisal Report on the Korea Development Bank" (No. 3106-KO dated November 20, 1980) is being distributed separately. Supplementary project data are provided in Annex III. Negotiations were held in Washington from October 20 to October 27, 1980, with a Korean delegation led by Mr. Myung Hyun Sohn, Deputy Director General of the Economic Cooperation Bureau of the Economic Planning Board.

##### The Korean Development Bank

51. Scope of Operations. KDB was established in 1954 to help in the postwar rehabilitation of industry and to finance economic development. KDB is the single largest financial institution in Korea and plays a leading role in providing term finance for industry. KDB has achieved an impressive growth of nearly 50% p.a. in its loan portfolio over the past two years and it stands out as a well-managed and efficient institution. At end-1979, KDB had a total staff of 1,960 organized into 21 departments, 10 regional branches and 7 overseas representative offices. At end-1979, its total assets reached \$13.7 billion (including loan guarantees of \$7.7 billion) and

accounted for 14.2% of the total assets of the financial sector. In 1979, KDB's loan commitments totalled \$2.0 billion and loan guarantees \$2.4 billion. KDB administers solely or jointly with other financial institutions all the major industrial financing programs sponsored and funded by the Government. In addition to industry, KDB supports major projects in the transportation and power sectors. KDB's lending to the private sector accounts for an increasing share of its loan portfolio (52% on an outstanding basis at end-1979).

52. KDB provides its clientele with a comprehensive range of financial services including domestic and foreign currency lending for equipment purchases; working capital; equity participation; issuance of loan guarantees; and general foreign exchange business (letters of credit). KDB is most active in equipment financing both directly through its lending operations and indirectly through issuance of guarantees to other lenders inside and outside Korea. Working capital loans accounted for 17.5% of KDB's aggregate commitments in 1976-79. Foreign currency operations accounted for just over 20% of KDB's loan commitments in 1978-79.

53. KDB's Developmental Impact. KDB has an impressive record in (a) transferring financial resources to the vitally important industrial sector; (b) building up its institutional capability as a development bank; and (c) deepening the structure of the financial sector in Korea.

54. KDB's loan disbursements have grown at an average annual rate of 61% over the three-year period 1977-79 and reached \$1.94 billion equivalent in 1979, or about 18% of total fixed investment in industry, power and transportation. KDB contributed 31.7% of the increase in term lending to the manufacturing sector over 1976-79 making it the single largest source of term finance for industry in Korea. Although foreign currency loans accounted for only 15% of KDB's portfolio at end-1979, it is the most important source of foreign exchange resources for industry. In 1979, KDB accounted for 29% of the foreign currency loans (by amount) to the manufacturing sector. As of December 31, 1979, KDB clients employed a total of 1 million persons, 80% in the manufacturing sector. The average cost per job for subprojects under the most recent Bank Loan was about \$35,000 and reflects KDB's primary role as a promoter of large projects in the priority sectors of power, shipbuilding, basic metals and machinery.

55. The institutional capability of KDB has improved markedly over the past five years. This is reflected in the quality of KDB's appraisal and supervision work as well as the soundness of its policies and procedures. KDB's appraisal standards and procedures are quite satisfactory for all projects funded from its own resources including foreign currency resources from official lenders (ADB, IBRD, et.al.). Because of government intervention in allocative decisions, KDB's input in the appraisal of projects funded with government resources tends to be less extensive. In cases where Government resources are not involved, increasing emphasis has been placed by KDB in

recent years on detailed economic analysis (including ERR calculations) and on the employment impact of projects. KDB is well equipped to carry out thorough economic and industrial research work having a large and competent research unit. KDB's project supervision is thorough and effective as reflected in the good quality of its portfolio.

56. KDB's procurement and disbursement practices are sound. ADB and the Bank have helped KDB strengthen its procedures. Procurement methods now emphasize International Competitive Bidding (ICB) and limited competitive bidding for smaller contracts (less than US\$1 million equivalent). ICB is the most frequent form of procurement and it accounted for 56% of all procurement contracts under the previous Bank loan (Loan 1574-KO) to KDB.

57. KDB's operational policies are guided by a Policy Statement adopted in 1975. In addition to the general policy guidelines provided in this document, KDB adopted, in 1978, the practice of formulating, in consultation with the Bank, strategy statements highlighting its short-run developmental objectives over a two-year period. These objectives focus on KDB's efficiency in resource mobilization and allocation as well as its developmental activities in the industrial and financial sectors.

58. Another measure of KDB's importance as a development institution is the impact achieved in developing and deepening the structure of the Korean financial system by sponsoring the establishment of several specialized financial institutions. Since 1973, KDB has helped establish a leasing company, two merchant banks and two overseas investment banks. These companies were established as joint ventures with other Korean and/or foreign financial institutions. KDB has used part of the previous Bank loans to finance the operation of its leasing subsidiary.

59. Resource Allocation. The mere size of KDB's loan disbursements of nearly \$2 billion in 1979 is an indicator of the importance of its performance in resource allocation. KDB's operations have provided direct support to the Government's industrial development strategy. Its lending has been directed primarily toward the priority areas of manufacturing, power and transportation, which accounted, respectively, for 50%, 25% and 17% of its outstanding loan portfolio at end-1979. Within manufacturing, heavy and chemical industries accounted for 77%. The Government exerts its influence on KDB by issuing directives related to particular allocative decisions. Government directives are most commonly exercised for operations funded with either budgetary resources or under specialized programs such as NIF. These two types of government-funded operations accounted respectively for 12.6% and 41.7% of KDB's loan portfolio at end-1979. Government intervention in allocative decisions ranges from the determination of broad sectoral lending targets to allocation by term, by currency and, at times, by individual firms. In all, approximately 75% of KDB's lending operations are subject to some degree of government direction. Thus, KDB acts, at times, as a mere channel of Governmental funds. The Government concedes that in such instances, KDB

does not subject the schemes in question to its normal procedures of scrutiny in order to establish their financial and economic viability. Accordingly, the Government agreed to relieve KDB of the financial risks associated with most of the lending operations undertaken at the former's behest at the time the Bank's first loan (Loan No. 1095-KO) to KDB was made in March 1975. At the same time, there is scope for enhancing the role and responsibilities of KDB in helping determine sectoral priorities and fund allocation under the Government-sponsored program of directed/subsidized lending. This has been dealt with in the policy undertakings described in para. 45 above.

60. KDB is expected to allocate the resources it raises independently in accordance with the priorities defined in the 1953 Act which established KDB. These include power, coal mining, shipbuilding, iron and steel, semiconductors, marine and air transportation. In this instance, project-by-project allocation is determined independently by KDB within sectoral targets fixed annually in consultation with the Ministry of Finance. Foreign borrowings from official institutions (IBRD, ADB, et.al.) are immune from government directives.

61. The quality of KDB's portfolio is satisfactory. At the end of 1979, companies operating profitably accounted for about 90% of the loan portfolio. Arrears amounted to only 7% of the outstanding portfolio; and arrears over three months accounted for no more than 0.5%.

62. Resource Mobilization. KDB's performance in mobilizing resources through direct borrowings and, indirectly, through the issuance of loan guarantees has been most impressive, particularly in the past four years. KDB's outstanding liabilities (excluding guarantees) have grown at an average of 48% p.a. over 1977-79 and reached the equivalent of \$4.64 billion at end-1979. Foreign currency borrowings, particularly from commercial sources, have grown very rapidly and have brought about a reduction in the share of domestic currency borrowings from 75.1% of total borrowings in 1975 to 64.3% in 1979.

63. Budgetary appropriations and special government funds (including NIF) provide the bulk of KDB's domestic currency resources. Their combined share has increased from 77% of KDB's total domestic currency borrowings in 1975 to 83% in 1979, due to the slower growth of KDB's other domestic currency resources, i.e., deposits and debentures. The domestic currency resources raised by KDB independently from the Government consist almost exclusively of debentures issued with a maturity of one to five years. Issuance of debentures is encouraged by the Government as a means of increasing KDB's resources and of lengthening maturities in the securities market. Although KDB has been raising increasing amounts of funds through debenture issues, their share in KDB's total domestic currency resources has been declining from 16.6% in 1975 to 9.9% in 1979. KDB's limited success in issuing debentures is due to the fact that the onlending of debenture proceeds gives KDB a negative interest spread of about two percentage points. The

agreement reached during negotiations (para. 46 above) to allow KDB to charge a rate which would allow for a positive spread on its debentures proceeds should alleviate this problem.

64. KDB has been extremely successful at mobilizing increasing amounts of foreign currency resources, particularly from the international market. Over the period 1975-79, KDB has mobilized a total of \$1.68 billion of which 23% was supplied by official sources (ADB, IBRD and KfW). KDB's reliance on foreign official borrowings, which reached 75% of total foreign borrowings over 1966-73, declined to 23% over 1975-79. A further reduction is expected in the coming years.

65. KDB has experienced a shortage of domestic currency resources over the last decade. Over 1975-79, its outstanding domestic currency loans have increased by only W 1.15 billion (\$2.37 billion) while outstanding domestic currency borrowings increased by W 850 billion (\$1.75 billion). At end-1979, outstanding domestic currency loans reached W 1,815 billion (\$3.7 billion) compared to outstanding domestic currency borrowings of W 1,447 billion (\$3.0 billion). This resource gap has been covered through the conversion of a part of KDB's foreign commercial borrowings into domestic currency. Despite the foreign exchange risk involved (which is passed on to the subborrowers), the cost of these funds to KDB and to the subborrowers has been much lower than alternative domestic currency resources such as debentures.

66. The conversion by KDB of part of its foreign commercial borrowings into domestic currency through deposits at the BOK has also provided effective support to Korea's balance of payments. In view of the sizeable deficit of the balance of payments in 1979, the Government has requested KDB to provide more direct support by depositing with BOK a part of its "jumbo" \$600 million commercial loan which KDB raised that year. This new mandate given to KDB (and the Korea Exchange Bank) by the Government, effectively makes it a borrowing agent for the Korean Government in international capital markets.

67. Financial Projections and Resource Requirements. KDB's business and financial forecasts in connection with the proposed loan are based on very conservative assumptions. Its volume of operations, despite the present slow down of industrial activity, is likely to be restricted by resource considerations rather than any lack of demand for KDB's assistance. Loan commitments are projected to expand at a rate of 14% p.a. over 1981-83 (compared to a historical rate of 47% over 1976-79) and equity investments at 21% p.a. Foreign currency lending operations would remain at about 20% of total loan commitments, the level reached in 1979. KDB's total assets are expected to grow at 24% p.a., and to reach \$11.9 billion in 1983. The long-term debt/equity ratio would remain within the contractual limit of 10:1 throughout the projection period.

68. As in the past, the actual level of KDB's operations would depend upon resource availability. Over 1980-83, KDB plans to raise a total of W 4.8 billion (\$8.2 billion), of which 37% would be in foreign currency.



Official sources of funds, including the proposed Bank loan, would provide 8.5% of total foreign currency borrowings of \$3.1 billion. The proposed \$100 million loan would cover about 10% of KDB's projected foreign currency commitments (\$987 million) over 1981-82. Despite the conservativeness of its business forecasts, KDB would need to borrow heavily from both the Government (\$3.3 billion equivalent) and from foreign commercial sources (\$2.8 billion) to support its operations over 1980-83. The high priority accorded by the Government to revive industrial growth and KDB's excellent credit standing in the international capital market indicate that it will be able to secure these resources without undue difficulty.

69. KDB's reliance on official borrowings has declined markedly in recent years because of its success in mobilizing foreign currency resources from commercial sources. A complete phasing out of KDB's reliance on official borrowings does not seem feasible nor desirable in the near future. Only official borrowings have a maturity which is long enough to meet the requirements of many of the skill and technology intensive projects which KDB finances. The maturity of KDB's other resources, domestic or foreign is too short for this purpose.

#### Main Features of the Loan

70. As with previous Bank loans to KDB, the proposed loan would be used to finance (a) 100% of the foreign exchange cost of directly imported goods and services and (b) 60% of the cost in domestic currency (representing the estimated foreign exchange component) of locally manufactured or procured machinery and equipment (Section 2.02(a) of the Loan Agreement). Procurement would be in accordance with KDB's standard procedures which are satisfactory. The long-term debt/equity limit agreed with KDB which was raised to 10:1 in July 1979 is adequate and would be maintained (Section 4.06 of the Loan Agreement). In view of the very satisfactory standard of KDB's appraisal work, it is recommended that the free limit on individual subloans which was set at \$2.5 million under the previous Bank loan be raised to \$5 million (Section 2.02(a) of the Loan Agreement). It is estimated that the proposed free limit of \$5 million will result in approximately 40% of the proposed loan being allocated to subprojects requiring detailed review by the Bank prior to approval. A subloan ceiling of \$10 million is recommended under the proposed loan (compared to \$7.5 million under the previous loan) in view of the size of some of the heavy industry projects financed by KDB (Section 2.02(a) of the Loan Agreement).

#### Terms and Conditions of Subloans

71. The proposed loan would have an adjustable composite amortization schedule reflecting the aggregate amortization schedules of the subloans made by KDB. The loan is expected to be fully repaid within 15 years including a grace period of three years. Individual subloans would have a maximum maturity of 13 years including a normal grace period of 3 years, except in cases described below. In order to encourage increased mobilization of

medium-term foreign commercial borrowings by KDB, the Bank would allow some of the subloans to be funded with a mix of Bank and commercial resources. In such cases, the amortization schedules of the subloans would permit earlier repayment of commercial funds with the proceeds of the Bank loan being covered under later maturities. A grace period of up to five years would be accepted in such cases. KDB would relend the loan proceeds at an interest rate of two percentage points over the weighted average cost of available foreign official resources with the subborrowers assuming the foreign exchange risk. This is likely to result in a relending rate of about 11%. The 2% interest spread is more than adequate for KDB to cover the administrative costs incurred in processing its foreign exchange loans. Over the period 1972-80, the average depreciation of the Won vis-a-vis the US dollar has added a cost of about 6.5% p.a. to the cost of Bank funds. Furthermore, the Bank's practice of disbursing a mix of dollars and other foreign currencies has added an average cost of 5.3% p.a. to previous Bank loans, depending on the share of "hard" currencies. Even with the introduction of the currency pooling system (assuming that past trends in foreign exchange fluctuations remain unchanged) the lending rate of Bank funds is expected to reach an effective level of over 20% p.a. in Won terms which is slightly higher than the 19% rate applicable to most domestic currency loans in Korea. These rates are above the long-term inflation rate in Korea which was approximately 15% per annum during the period 1970-79. KDB's onlending rate is below the inflation level which has obtained so far in 1980 (the Wholesale Price Index is expected to rise by 40%). However, the Government has adopted a series of measures to contain inflation. If, as is expected, the rate of price increase returns to near the historical levels, KDB's onlending rates for both domestic and foreign currency would be positive in real terms.

#### Benefits and Risks

72. The continued expansion of the export-oriented industrial sector remains a key objective of the Government's development strategy. KDB's role is crucial within the Korean financial system and its performance to date has been highly satisfactory from both the developmental and institutional standpoints. KDB is a particularly suitable intermediary for allocating resources for the development of the industrial sector. The Bank's association with KDB has proved to be a productive and beneficial one. Through KDB, Bank resources totalling \$226.7 million (as of July 31, 1980) have been committed to over 200 economically and financially viable projects in the manufacturing, mining, infrastructure and transport sectors. The Bank has been successful in helping KDB improve its institutional capabilities and enhance the developmental impact of its operations.

73. Transfer of resources to industry and further progress of KDB from the institutional and developmental standpoints remain major objectives of the proposed loan. To the extent that DFC projects are quick disbursing, the loan would also contribute to meeting the heavy balance of payments

deficits expected over the next few years. The proposed loan is also expected to have a beneficial impact on the financial sector as a whole through the adoption of policy measures which were discussed with the Government at negotiations.

74. The proposed loan would assist worthwhile projects in the industrial sector. Experience with previous Bank loans to KDB shows that the projects financed with Bank resources were generally heavily export oriented and yielded substantial economic benefits to the country. Calculations of economic rates of return showed a range of 13% to 46%. The subprojects to be financed under the proposed loan, although not yet identified, are expected to yield similar economic benefits. There are no significant risks associated with the implementation of the project. Although the full impact of the financial sector reforms cannot be fully assessed in advance, these reforms are expected to have significantly positive effects on resource allocation and on investment efficiency. These effects will be monitored closely by Bank staff.

#### PART V - LEGAL INSTRUMENTS AND AUTHORITY

75. The draft Loan Agreement between the Bank and the Korea Development Bank, the draft Guarantee Agreement between the Republic of Korea and the Bank, a draft Supplemental Letter to the Guarantee Agreement (entitled "Financial Sector Policy Improvements"), and the report of the Committee provided for in Article III, Section 4(iii) of the Articles of Agreement of the Bank are being distributed to the Executive Directors separately. Special conditions of the loan are listed in Section III of Annex III.

#### PART VI - RECOMMENDATION

76. I recommend that the Executive Directors approve the proposed loan.

Robert S. McNamara  
President  
by: Moeen A. Qureshi

Attachments  
December 1, 1980

KOREA REPUBLIC OF - SOCIAL INDICATORS DATA SHEET

LAND AREA (THOUSAND SQ. KM.)	KOREA REPUBLIC OF			REFERENCE GROUPS (WEIGHTED AVERAGES - MOST RECENT ESTIMATE) <sup>1a</sup>	
	1960 /b	1970 /b	MOST RECENT ESTIMATE /b	MIDDLE INCOME ASIA & PACIFIC	MIDDLE INCOME LATIN AMERICA & CARIBBEAN
TOTAL	98.5				
AGRICULTURAL	22.7				
GNP PER CAPITA (US\$)	160.0	380.0	1160.0	894.8	1384.1
ENERGY CONSUMPTION PER CAPITA (KILOGRAMS OF COAL EQUIVALENT)	258.0	815.0	1359.0	842.4	1055.9
<b>POPULATION AND VITAL STATISTICS</b>					
POPULATION, MID-YEAR (MILLIONS)	24.7	31.4	36.6	.	.
URBAN POPULATION (PERCENT OF TOTAL)	27.7	40.7	52.1	39.1	63.4
POPULATION PROJECTIONS					
POPULATION IN YEAR 2000 (MILLIONS)			50.0	.	.
STATIONARY POPULATION (MILLIONS)			66.0	.	.
YEAR STATIONARY POPULATION IS REACHED			2070	.	.
POPULATION DENSITY					
PER SQ. KM.	251.0	319.0	372.0	376.1	28.1
PER SQ. KM. AGRICULTURAL LAND	1154.0	1371.0	1612.0	2350.4	81.7
POPULATION AGE STRUCTURE (PERCENT)					
0-14 YRS.	42.9	41.0	35.9	40.4	41.4
15-64 YRS.	53.8	55.7	60.3	56.2	54.7
65 YRS. AND ABOVE	3.3	3.3	3.8	3.4	3.9
POPULATION GROWTH RATE (PERCENT)					
TOTAL	1.9	2.4	1.9	2.4	2.7
URBAN	5.9	6.5	5.2	4.1	4.1
CRUDE BIRTH RATE (PER THOUSAND)	41.0	30.0	21.0	28.7	34.8
CRUDE DEATH RATE (PER THOUSAND)	13.0	10.0	8.0	7.9	8.9
GROSS REPRODUCTION RATE	3.1/c	2.6	1.4	1.9	2.5
FAMILY PLANNING					
ACCEPTORS, ANNUAL (THOUSANDS)	..	672.0	686.0	.	.
USERS (PERCENT OF MARRIED WOMEN)	..	42.0	43.9	39.0	..
<b>FOOD AND NUTRITION</b>					
INDEX OF FOOD PRODUCTION PER CAPITA (1969-71=100)	89.0	99.0	115.0	116.9	106.9
PER CAPITA SUPPLY OF					
CALORIES (PERCENT OF REQUIREMENTS)	94.0	110.0	119.0	108.9	107.4
PROTEINS (GRAMS PER DAY)	55.0	65.0	73.0	60.3	65.6
OF WHICH ANIMAL AND PULSE	7.0	8.0	15.0	18.8	33.7
CHILD (AGES 1-4) MORTALITY RATE	13.0	8.0	5.0	5.3	8.4
<b>HEALTH</b>					
LIFE EXPECTANCY AT BIRTH (YEARS)	54.0	59.0	63.0	63.0	63.1
INFANT MORTALITY RATE (PER THOUSAND)	62.0	43.0	37.0	52.8	66.5
ACCESS TO SAFE WATER (PERCENT OF POPULATION)					
TOTAL	..	58.0	62.0	42.4	65.9
URBAN	..	84.0	80.0	62.1	80.4
RURAL	..	38.0	36.0	29.7	44.0
ACCESS TO EXCRETA DISPOSAL (PERCENT OF POPULATION)					
TOTAL	..	25.0	61.0	52.8	62.3
URBAN	..	59.0	68.0	71.1	79.4
RURAL	..	..	50.0	42.4	29.6
POPULATION PER PHYSICIAN	3000.0	2110.0	1955.0	4120.1	1849.2
POPULATION PER NURSING PERSON	3220.0/d	2170.0/d	510.0	2213.6	1227.5
POPULATION PER HOSPITAL BED					
TOTAL	2482.0	1900.0	1569.0	819.4	480.3
URBAN	..	..	..	..	..
RURAL	..	..	..	..	..
ADMISSIONS PER HOSPITAL BED	..	14.9	..	28.8	..
<b>HOUSING</b>					
AVERAGE SIZE OF HOUSEHOLD					
TOTAL	5.6	5.3	5.1	..	..
URBAN	5.4	5.0	4.9	..	..
RURAL	5.6	5.5	5.3	..	..
AVERAGE NUMBER OF PERSONS PER ROOM					
TOTAL	2.5	2.3	2.0	..	..
URBAN	2.8	2.7	2.1	..	..
RURAL	2.4	2.2	2.0	..	..
ACCESS TO ELECTRICITY (PERCENT OF DWELLINGS)					
TOTAL	28.0	49.9	..	..	..
URBAN	67.3	92.4	..	..	..
RURAL	12.0	29.9	64.9	..	..

KOREA REPUBLIC OF - SOCIAL INDICATORS DATA SHEET

	KOREA REPUBLIC OF			REFERENCE GROUPS (WEIGHTED AVERAGES - MOST RECENT ESTIMATE) <sup>/a</sup>	
	1960 <sup>/b</sup>	1970 <sup>/b</sup>	MOST RECENT ESTIMATE <sup>/b</sup>	MIDDLE INCOME ASIA & PACIFIC	MIDDLE INCOME LATIN AMERICA & CARIBBEAN
<b>EDUCATION</b>					
ADJUSTED ENROLLMENT RATIOS					
PRIMARY: TOTAL	94.0	105.0	111.0	98.6	99.7
MALE	99.0	106.0	111.0	99.2	101.0
FEMALE	89.0	105.0	111.0	97.7	99.4
SECONDARY: TOTAL	27.0	43.0	88.0	55.5	34.4
MALE	38.0	52.0	96.0	60.7	33.5
FEMALE	14.0	34.0	78.0	49.9	34.7
VOCATIONAL ENROL. (% OF SECONDARY)	14.0	16.0	16.0	13.7	38.2
PUPIL-TEACHER RATIO					
PRIMARY	58.0	57.0	49.0	34.6	30.5
SECONDARY	34.0	37.0	38.0	28.5	14.5
ADULT LITERACY RATE (PERCENT)	70.6	87.0	93.0	85.8	76.3
<b>CONSUMPTION</b>					
PASSENGER CARS PER THOUSAND POPULATION	0.4	2.0	3.5	9.0	43.0
RADIO RECEIVERS PER THOUSAND POPULATION	32.0	131.0	144.0	118.9	245.3
TV RECEIVERS PER THOUSAND POPULATION	0.3	14.0	66.0	39.4	84.2
NEWSPAPER ("DAILY GENERAL INTEREST") CIRCULATION PER THOUSAND POPULATION	69.0	138.0	173.0	..	63.3
CINEMA ANNUAL ATTENDANCE PER CAPITA	4.0	5.0	2.2	4.9	..
<b>LABOR FORCE</b>					
TOTAL LABOR FORCE (THOUSANDS)	8237.0	10978.3	13767.4	.	.
FEMALE (PERCENT)	25.8	32.7	33.0	36.8	22.2
AGRICULTURE (PERCENT)	66.4	51.0	41.0	51.9	37.1
INDUSTRY (PERCENT)	9.3	20.1	37.0	21.9	23.5
PARTICIPATION RATE (PERCENT)					
TOTAL	33.4	35.0	36.6	39.1	31.5
MALE	49.5	46.8	48.8	48.5	48.9
FEMALE	17.2	23.0	24.2	29.6	14.0
ECONOMIC DEPENDENCY RATIO	1.5	1.4	1.1	1.1	1.4
<b>INCOME DISTRIBUTION</b>					
PERCENT OF PRIVATE INCOME RECEIVED BY					
HIGHEST 5 PERCENT OF HOUSEHOLDS	15.1/ <sup>e</sup>	17.1	16.1	..	..
HIGHEST 20 PERCENT OF HOUSEHOLDS	42.3/ <sup>e</sup>	44.5	45.3	..	..
LOWEST 20 PERCENT OF HOUSEHOLDS	5.7/ <sup>e</sup>	7.1	5.7	..	..
LOWEST 40 PERCENT OF HOUSEHOLDS	19.0/ <sup>e</sup>	17.7	16.9	..	..
<b>POVERTY TARGET GROUPS</b>					
ESTIMATED ABSOLUTE POVERTY INCOME LEVEL (US\$ PER CAPITA)					
URBAN	..	..	320.0	..	..
RURAL	..	..	270.0	192.1	190.8
ESTIMATED RELATIVE POVERTY INCOME LEVEL (US\$ PER CAPITA)					
URBAN	..	..	270.0/ <sup>f</sup>	..	474.0
RURAL	..	..	227.0/ <sup>f</sup>	182.5	332.5
ESTIMATED POPULATION BELOW ABSOLUTE POVERTY INCOME LEVEL (PERCENT)					
URBAN	..	..	18.0	..	..
RURAL	..	..	11.0	33.2	..

.. Not available  
. Not applicable.

NOTES

/a The group averages for each indicator are population-weighted arithmetic means. Coverage of countries among the indicators depends on availability of data and is not uniform.

/b Unless otherwise noted, data for 1960 refer to any year between 1959 and 1961; for 1970, between 1969 and 1971; and for Most Recent Estimate, between 1974 and 1978.

/c 1950-55; /d Registered, not all practicing in the country; /e 1965., /f Recent estimates are \$370 and \$310 respectively.

## DEFINITIONS OF SOCIAL INDICATORS

Notes: Although the data are drawn from sources generally judged the most authoritative and reliable, it should also be noted that they may not be internationally comparable because of the lack of standardized definitions and concepts used by different countries in collecting the data. The data are, nonetheless, useful to describe orders of magnitude, indicate trends, and characterize certain major differences between countries.

The reference groups are (1) the same country group of the subject country and (2) a country group with somewhat higher average income than the country group of the subject country (except for "Capital Surplus Oil Exporters" group where "Middle Income North Africa and Middle East" is chosen because of stronger socio-cultural affinities). In the reference group data the averages are population weighted arithmetic means for each indicator and shown only when at least half of the countries in a group has data for that indicator. Since the coverage of countries among the indicators depends on the availability of data and is not uniform, caution must be exercised in relating averages of one indicator to another. These averages are only useful in comparing the value of one indicator at a time among the country and reference groups.

## LAND AREA (thousand sq. km.)

**Total** - Total surface area comprising land area and inland waters.  
**Agricultural** - Estimate of agricultural area used temporarily or permanently for crops, pastures, market and kitchen gardens or to lie fallow; 1977 data.

**GNP PER CAPITA (US\$)** - GNP per capita estimates at current market prices, calculated by same conversion method as World Bank Atlas (1976-78 basis); 1960, 1970, and 1978 data.

**ENERGY CONSUMPTION PER CAPITA** - Annual consumption of commercial energy (coal and lignite, petroleum, natural gas and hydro-, nuclear and geothermal electricity) in kilograms of coal equivalent per capita; 1960, 1970, and 1978 data.

## POPULATION AND VITAL STATISTICS

**Total Population, Mid-Year (millions)** - As of July 1; 1960, 1970, and 1978 data.

**Urban Population (percent of total)** - Ratio of urban to total population; different definitions of urban areas may affect comparability of data among countries; 1960, 1970, and 1978 data.

**Population Projections**  
**Population in year 2000** - Current population projections are based on 1980 total population by age and sex and their mortality and fertility rates. Projection parameters for mortality rates comprise of three levels assuming life expectancy at birth increasing with country's per capita income level, and female life expectancy stabilizing at 77.5 years. The parameters for fertility rate also have three levels assuming decline in fertility according to income level and past family planning performance. Each country is then assigned one of these nine combinations of mortality and fertility trends for projection purposes.  
**Stationary population** - In a stationary population there is no growth since the birth rate is equal to the death rate, and also the age structure remains constant. This is achieved only after fertility rates decline to the replacement level of unit net reproduction rate, when each generation of women replaces itself exactly. The stationary population size was estimated on the basis of the projected characteristics of the population in the year 2000, and the rate of decline of fertility rate to replacement level.

**Year stationary population is reached** - The year when stationary population size has been reached.

## Population Density

**Per sq. km.** - Mid-year population per square kilometer (100 hectares) of total area.

**Per sq. km. agricultural land** - Computed as above for agricultural land only.

**Population Age Structure (percent)** - Children (0-14 years), working-age (15-64 years), and retired (65 years and over) as percentages of mid-year population; 1960, 1970, and 1978 data.

**Population Growth Rate (percent)** - total - Annual growth rates of total mid-year populations for 1950-60, 1960-70, and 1970-78.

**Population Growth Rate (percent)** - urban - Annual growth rates of urban populations for 1950-60, 1960-70, and 1970-78.

**Crude Birth Rate (per thousand)** - Annual live births per thousand of mid-year population; 1960, 1970, and 1978 data.

**Crude Death Rate (per thousand)** - Annual deaths per thousand of mid-year population; 1960, 1970, and 1978 data.

**Gross Reproduction Rate** - Average number of daughters a woman will bear in her normal reproductive period if she experiences present age-specific fertility rates; usually five-year averages ending in 1960, 1970, and 1977.

**Family Planning - Acceptors, Annual (thousands)** - Annual number of acceptors of birth-control devices under auspices of national family planning program.

**Family Planning - Users (percent of married women)** - Percentage of married women of child-bearing age (15-44 years) who use birth-control devices to all married women in same age group.

## FOOD AND NUTRITION

**Index of Food Production per Capita (1969-71=100)** - Index of per capita annual production of all food commodities. Production excludes seed and feed and is on calendar year basis. Commodities cover primary goods (e.g. sugarcane instead of sugar) which are edible and contain nutrients (e.g. coffee and tea are excluded). Aggregate production of each country is based on national average producer price weights; 1961-65, 1970, and 1978 data.

**Per capita supply of calories (percent of requirements)** - Computed from energy equivalent of net food supplies available in country per capita per day. Available supplies comprise domestic production, imports less exports, and changes in stock. Net supplies exclude animal feed, seeds, quantities unaccounted for, and losses in distribution. Requirements were estimated by FAO based on physiological needs for normal activity and health considering environmental temperature, body weights, age and sex distribution of population, and allowing 10 percent for waste at household level; 1961-65, 1970, and 1977 data.

**Per capita supply of protein (grams per day)** - Protein content of per capita net supply of food per day. Net supply of food is defined as above. Requirements for all countries established by USDA provide for minimum allowance of 60 grams of total protein per day and 20 grams of animal and pulse protein, of which 10 grams should be animal protein. These standards are lower than those of 75 grams of total protein and 23 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Survey; 1961-65, 1970 and 1977 data.

**Per capita protein supply from animal and pulse** - Protein supply of food derived from animals and pulses in grams per day; 1961-65, 1970 and 1977 data.

**Child (ages 1-4) Mortality Rate (per thousand)** - Annual deaths per thousand in age group 1-4 years, to children in this age group; for most developing countries data derived from life tables; 1960, 1970 and 1977 data.

## HEALTH

**Life Expectancy at Birth (years)** - Average number of years of life remaining at birth; 1960, 1970 and 1978 data.

**Infant Mortality Rate (per thousand)** - Annual deaths of infants under one year of age per thousand live births.

**Access to Safe Water (percent of population)** - total, urban, and rural - Number of people (total, urban, and rural) with reasonable access to safe water supply (includes treated surface waters or untreated but uncontaminated water such as that from protected boreholes, springs, and sanitary wells) as percentages of their respective populations. In an urban area a public fountain or standpost located not more than 200 meters from a house may be considered as being within reasonable access of that house. In rural areas reasonable access would imply that the housewife or members of the household do not have to spend a disproportionate part of the day in fetching the family's water needs.

**Access to Excreta Disposal (percent of population - total, urban, and rural)** - Number of people (total, urban, and rural) served by excreta disposal as percentages of their respective populations. Excreta disposal may include the collection and disposal, with or without treatment, of human excreta and waste-water by water-borne systems or the use of pit privies and similar installations.

**Population per Physician** - Population divided by number of practicing physicians qualified from a medical school at university level.

**Population per Nursing Person** - Population divided by number of practicing male and female graduate nurses, practical nurses, and assistant nurses.

**Population per Hospital Bed** - total, urban, and rural - Population (total, urban, and rural) divided by their respective number of hospital beds available in public and private general and specialized hospital and rehabilitation centers. Hospitals are establishments permanently staffed by at least one physician. Establishments providing principally custodial care are not included. Rural hospitals, however, include health and medical centers not permanently staffed by a physician (but by a medical assistant, nurse, midwife, etc.) which offer in-patient accommodation and provide a limited range of medical facilities. For statistical purposes urban hospitals include WHO's principal general and specialized hospitals, and rural hospitals local or rural hospitals and medical and maternity centers.

**Admissions per Hospital Bed** - Total number of admissions to or discharges from hospitals divided by the number of beds.

## HOUSING

**Average Size of Household (persons per household)** - total, urban, and rural - A household consists of a group of individuals who share living quarters and their main meals. A boarder or lodger may or may not be included in the household for statistical purposes.

**Average number of persons per room** - total, urban, and rural - Average number of persons per room in all urban, and rural occupied conventional dwellings, respectively. Dwellings exclude non-permanent structures and unoccupied parts.

**Access to Electricity (percent of dwellings)** - total, urban, and rural - Conventional dwellings with electricity in living quarters as percentage of total, urban, and rural dwellings respectively.

## EDUCATION

## Adjusted Enrollment Ratios

**Primary school - total, male and female** - Gross total, male and female enrollment of all ages at the primary level as percentages of respective primary school-age populations; normally includes children aged 6-11 years but adjusted for different lengths of primary education; for countries with universal education enrollment may exceed 100 percent since some pupils are below or above the official school age.

**Secondary school - total, male and female** - Computed as above; secondary education requires at least four years of approved primary instruction; provides general, vocational, or teacher training instructions for pupils usually of 12 to 17 years of age; correspondence courses are generally excluded.

**Vocational enrollment (percent of secondary)** - Vocational institutions include technical, industrial, or other programs which operate independently or as departments of secondary institutions.

**Pupil-teacher ratio - primary, and secondary** - Total students enrolled in primary and secondary levels divided by numbers of teachers in the corresponding levels.

**Adult literacy rate (percent)** - Literate adults (able to read and write) as a percentage of total adult population aged 15 years and over.

## CONSUMPTION

**Passenger Cars (per thousand population)** - Passenger cars comprise motor cars seating less than eight persons; excludes ambulances, hearses and military vehicles.

**Radio Receivers (per thousand population)** - All types of receivers for radio broadcasts to general public per thousand of population; excludes unlicensed receivers in countries and in years when registration of radio sets was in effect; data for recent years may not be comparable since most countries abolished licensing.

**TV Receivers (per thousand population)** - TV receivers for broadcast to general public per thousand population; excludes unlicensed TV receivers in countries and in years when registration of TV sets was in effect.

**Newspaper Circulation (per thousand population)** - Shows the average circulation of "daily general interest newspaper", defined as a periodical publication devoted primarily to recording general news. It is considered to be "daily" if it appears at least four times a week.

**Cinema Annual Attendance per Capita per Year** - Based on the number of tickets sold during the year, including admissions to drive-in cinemas and mobile units.

## LABOR FORCE

**Total Labor Force (thousands)** - Economically active persons, including armed forces and unemployed but excluding housewives, students, etc. Definitions in various countries are not comparable; 1960, 1970 and 1978 data.

**Female (percent)** - Female labor force as percentage of total labor force.

**Agriculture (percent)** - Labor force in farming, forestry, hunting and fishing as percentage of total labor force; 1960, 1970 and 1978 data.

**Industry (percent)** - Labor force in mining, construction, manufacturing and electricity, water and gas as percentage of total labor force; 1960, 1970 and 1978 data.

**Participation Rate (percent)** - total, male, and female - Participation or activity rates are computed as total, male, and female labor force as percentages of total, male and female population of all ages respectively; 1960, 1970, and 1975 data. These are ILO's participation rates reflecting age-sex structure of the population, and long time trend. A few estimates are from national sources.

**Economic Dependency Ratio** - Ratio of population under 15 and 65 and over to the total labor force.

## INCOME DISTRIBUTION

**Percentage of Private Income (both in cash and kind)** - Received by richest 5 percent, richest 20 percent, poorest 20 percent, and poorest 40 percent of households.

## POVERTY TARGET GROUPS

**Estimated Absolute Poverty Income Level (US\$ per capita)** - urban and rural - Absolute poverty income level is that income level below which a minimal nutritionally adequate diet plus essential non-food requirements is not affordable.

**Estimated Relative Poverty Income Level (US\$ per capita)** - urban and rural - Rural relative poverty income level is one-third of average per capita personal income of the country. Urban level is derived from the rural level with adjustment for higher cost of living in urban areas.

**Estimated Population Below Absolute Poverty Income Level (percent)** - urban and rural - Percent of population (urban and rural) who are "absolute poor".

ECONOMIC DEVELOPMENT DATA SHEET

	Actual /e									Projected		Growth rates (%)		
	1965	1970	1972	1973	1974	1975	1976	1977	1978	1979	1980	1965-75	1978	1978-80
<b>A. National Accounts</b> (Million US\$ at 1975 prices)														
1. GDP	6,939.3	11,760.4	13,852.7	16,127.4	17,542.2	19,089.2	21,947.8	25,769.0	28,688.0	31,324.0	33,938.0	10.7	11.3	8.7
2. Gains from TOT	140.4	665.3	1,122.9	1,486.4	348.7	-	1,160.5	1,511.0	1,685.0	1,350.0	1,337.0	-	-	-
3. Gross domestic income	7,079.7	12,425.7	14,975.6	17,613.7	17,890.9	19,089.2	23,108.4	27,280.0	30,373.0	32,674.0	35,275.0	10.4	11.3	7.7
4. Imports (goods and NFS)	984.3	4,228.6	5,273.4	7,154.3	7,373.4	7,464.0	9,680.0	11,723.0	15,138.0	16,077.0	16,636.0	22.5	29.1	4.9
5. Exports volume	388.3	1,843.8	3,111.5	5,001.9	4,887.9	5,678.6	8,129.6	10,210.0	11,994.0	12,294.0	12,827.0	30.7	17.5	3.4
6. Exports (adjusted for TOT)	528.7	2,509.1	4,234.3	6,488.3	5,236.6	5,678.6	9,290.1	11,721.0	13,978.0	13,644.0	14,164.0	26.1	19.2	0.6
7. Resource gap (adjusted for TOT)	455.6	1,719.5	1,039.0	666.0	2,136.8	1,785.4	389.9	2.0	1,160.0	2,433.0	2,472.0	-	-	-
8. Total consumption	6,873.1	10,771.0	12,686.9	13,617.4	14,525.2	15,381.1	16,538.4	19,187.0	21,299.0	23,006.0	24,616.0	8.3	11.0	7.5
9. Investment	917.1	3,276.1	3,105.5	4,275.9	5,070.2	5,120.6	5,874.4	7,975.0	10,841.0	11,900.0	12,852.0	18.8	35.9	8.8
10. Domestic savings (adjusted for TOT)	206.6	1,654.8	2,288.7	3,996.3	3,365.7	3,708.1	6,569.9	8,093.0	9,373.0	9,668.0	10,659.0	33.6	15.8	7.4
11. GDP at current US\$	2,996.5	8,303.4	9,835.8	12,393.1	16,780.1	19,089.2	25,369.5	35,375.0	47,582.0	60,488.0	72,633.0	20.7	34.5	23.9
<b>B. Sector Output</b> (Share of GDP at 1975 prices)														
1. Agriculture, forestry and fisheries	46.3	32.8	29.3	26.1	25.3	24.9	23.6	22.2	19.1	19.6	19.1	-	-	-
2. Mining and manufacturing	13.9	20.5	23.4	26.2	28.2	29.2	31.8	30.6	32.9	31.9	32.0	-	-	-
3. Other	39.8	46.7	47.4	47.8	46.5	45.9	44.5	47.2	48.0	48.5	48.9	-	-	-
<b>C. Prices (1975=100)</b>														
1. Export price index /a	57.7	67.4	67.3	85.2	107.9	100.0	111.7	120.7	132.9	154.1	167.7	-	-	-
2. Import price index /a	46.3	46.2	46.8	62.5	97.2	100.0	98.0	105.2	114.0	138.8	151.9	-	-	-
3. Terms of trade index	124.6	145.9	143.8	136.3	111.0	100.0	114.0	114.8	116.5	111.0	110.4	-	-	-
4. GDP deflator	43.2	70.6	71.0	76.8	95.7	100.0	115.6	137.3	165.9	193.1	214.0	-	-	-
5. Average exchange rate	266.2	310.4	394.0	398.5	406.0	484.0	484.0	484.0	484.0	484.0	484.0	-	-	-
<b>D. Selected Indicators</b>														
1. ICOR	2.39	3.75												
2. Import elasticity	2.10	1.08												
3. Average domestic savings rate	0.15	0.31												
4. Marginal domestic savings rate	0.29	0.25												
5. Imports/GDP	0.36	0.49												
6. Investment/GDP	0.25	0.36												
7. Resource gap/GDY	0.11	0.05												
<b>E.</b>														
1. Labor force (million)	8.9	10.2	12.3	13.4	13.9									
2. Unemployment (% of E.1)	7.9	4.9	4.1	3.8	3.2									
3. Employment (million)	8.2	9.7	11.8	12.9	13.5									
(% shares)	100.0	100.0	100.0	100.0	100.0									
3.1 Agriculture, forestry, fisheries	58.6	50.5	45.9	41.8	38.4									
3.2 Mining and manufacturing	10.4	14.3	19.1	22.4	28.5									
3.3 Other	31.0	35.2	35.0	35.8	33.1									
<b>F. Public Finance /b</b> (% of GDP)														
1. Current revenue	17.8	16.9	18.3	20.3	22.9	22.7								
1.1 Tax revenue	13.5	13.2	15.0	16.8	18.9	18.9								
2. Current expenditure	14.2	11.6	12.4	14.4	14.3	15.7								
2.1 Defense expenditures	4.5	3.7	4.4	4.8	5.7	6.3								
3. Government saving	3.5	5.3	5.0	5.8	8.5	7.0								
4. Capital expenditure /c	11.3	8.7	8.0	8.3	12.7	10.5								

/a Data for 1965-76 refer to merchandise trade only, 1977-80 data include merchandise and nonfactor services.

/b Refers to the Government Sector, comprising Central Government (including government enterprises), Local Government and Special Accounts.

/c Refers to total capital expenditures, less repayment of debts.

/d Budget estimates.

/e Data for 1977 and 1978 are based on revised National Accounts (BOK, August 1979); details of the revised historical series for 1965-76 were not available at this time.

November 29, 1979

**BALANCE OF PAYMENTS AND EXTERNAL ASSISTANCE**  
(\$ million at current prices)

	1969	1970	1971	1972	Actual 1973	1974	1975	1976	1977	1978	Projected 1979	1980
<b>A. Summary of Balance of Payments</b>												
1. Exports (incl. NFS)	998	1,221	1,478	2,075	3,962	5,125	5,679	9,111	12,328	15,940	18,942	21,512
2. Imports (incl. NFS)	1,880	2,064	2,490	2,577	4,368	7,209	7,464	9,493	12,329	17,264	22,321	25,267
3. Resource balance	-882	-843	-1,012	-502	-406	-2,084	-1,785	-382	-1	-1,324	-3,379	-3,755
4. Net factor service income												
(1) Net interest payments	2	-29	-91	-138	-166	-229	-399	-411	-479	-702	-790	-997
of which interest on public MLT loans	-47	-68	-89	-120	-150	-201	-290	-345	-437	-653	-1,065	-1,374
(2) Direct investment income	-6	-8	-	-2	1	-8	-5	-37	-63	-80	-65	-46
(3) Workers' remittances (net) /a	-	-	-	-	-	-	-	-	-	-	-	-
(4) Other factor service income (net)	91	77	84	101	72	74	76	167	332	549	787	916
5. Current transfers (net)	246	180	171	170	190	224	226	349	223	472	500	600
6. Balance on current account	-549	-623	-848	-371	-309	-2,023	-1,887	-314	12	-1,085	-2,947	-3,282
7. Private direct investment	16	65	43	74	137	104	53	76	104	101	110	125
8. Official capital grants	150	131	84	87	61	64	-	-	-	-	-	-
<b>Public M &amp; LT Loans</b>												
9. Disbursements	660	414	625	735	757	1,155	1,687	1,701	2,212	3,919	4,965	5,275
10. Amortization	109	205	215	289	334	391	368	494	720	1,142	1,500	1,700
11. Net disbursements	551	209	410	446	423	764	1,319	1,207	1,492	2,777	3,465	3,575
<b>Other M &amp; LT Loans</b>												
12. Disbursements	17	78	33	49	71	174	85	115	46	-	-	-
13. Amortization	3	8	10	10	15	23	28	105	71	97	75	72
14. Net disbursements	14	70	23	39	56	151	57	10	-25	-97	-75	-72
15. Use of IMF resources /b	-	-10	-8	-10	-	132	130	97	-25	-2	-	-
16. Short-term capital transactions	57	122	135	-19	82	-45	680	357	21	-1,171	400	500
17. Capital transactions NEI /c	-78	71	112	-87	-110	868	141	-14	-233	108	70	154
18. Change in reserves (- = increase) /d	-161	-35	49	-139	-340	-15	-493	-1,419	-1,346	-631	-1,023	-1,000
19. Foreign exchange reserves /e (end of period)	549	584	535	694	1,034	1,049	1,542	2,961	4,307	4,938	5,961	6,961
<b>B. Grant and Loan Commitments</b>												
1. Official grant	150	131	84	87	61	64	-	-	-	-	-	-
2. Total public M & LT loans	753	475	689	813	1,073	1,972	1,304	3,613	3,304	5,014		
(1) IBRD	65	40	85	73	150	85	382.5	372	335	659		
(2) IDA	15	15	7	26	20	-	-	-	-	-		
(3) Other multilateral /f	25	20	81	68	46	89	101.5	114	135	50		
(4) Governments /g	102	161	255	479	383	477	360	917	406	1,190		
Of which centrally planned economies	-	-	-	-	-	-	-	-	-	-		
(5) Suppliers	374	134	248	94	223	486	232	689	1,144	1,027		
(6) Financial institutions	144	104	13	73	240	737	193	1,448	1,216	1,966		
(7) Bonds	-	-	-	-	-	19	-	60	68	122		
(8) Public loans NEI /h	28	1	-	-	11	79	34	-	-	-		
3. Other M & LT loans /i	100	26	67	74	213	120	138	97	16	-		
<b>Debt and Debt Services</b>												
Public debt outstanding & disbursed (end of period)				2,691	3,199	3,982	5,277	6,659	8,472	11,992		
Interest on public debt				120	150	201	290	389	437	653		
Repayments on public debt				289	334	391	368	504	717	1,142		
Total public debt service				409	484	592	658	893	1,154	1,795		
Other debt service (net)				23	33	54	60	103	125	140		
Total debt service (net)				432	517	646	718	996	1,279	1,935		
<b>Burden on Export Earnings (%)</b>												
Public debt service				19.7	12.2	11.6	11.6	9.8	9.2	11.3		
Total debt service				20.8	13.1	12.6	12.6	10.9	10.2	12.1		
TDS + Direct Invest. Inc.				20.7	13.1	12.4	12.6	11.3	10.7	12.6		
<b>Average Terms on Public Debt</b>												
Interest as % prior year DO&D				5.3	5.6	6.3	7.6	8.2	7.3	7.7		
Amortization as % prior year DO&D				12.9	12.4	12.2	9.2	10.9	11.9	13.5		
IBRD debt outstanding & disbursed				94.7	139.8	223.8	403.5	659.0	835.1	1,123.2		
IBRD as % public debt O&D				3.5	4.4	5.6	7.7	9.9	9.9	9.4		
IBRD as % public debt service				1.7	2.5	3.3	4.9	5.7	6.7	6.4		
IDA debt outstanding & disbursed				47.1	58.5	78.3	92.7	102.4	111.1	114.4		
IDA as % public debt O&D				1.8	1.8	2.0	1.8	1.5	1.3	1.0		
IDA as % public debt service				0.1	0.1	0.1	0.1	0.1	0.1	0.1		
<b>External Debt (Disbursed Only) Outstanding December 31, 1978</b>												
Amount												
1. IBRD	1,123.2											
2. Bank Group /j	1,237.5											
3. Other multilateral	400.9											
4. Government	3,353.9											
Of which centrally planned economies	-											
5. Suppliers	3,711.5											
6. Financial institutions	3,021.4											
7. Bonds	266.2											
8. Other public debt n.e.i.	-											
9. Total public debt	11,991.6											
10. Other MLT debt	461.2											
11. Total public and other MLT debt (disbursed)	12,452.8											
12. Total public and other MLT debt (incl. undisbursed)	19,080.7											
<b>C. Memorandum Items</b>												
1. Grant element of total commitments	25.2	25.8	30.5	37.2	25.2	27.7	10.6	11.1	8.0	7.4		
2. Average interest (%)	5.1	5.1	5.2	4.8	6.1	8.0	7.9	8.0	8.2	8.8		
3. Average maturity (years)	14.1	17.9	19.0	23.6	18.3	11.6	13.0	13.0	11.4	14.4		

- /a Included in other factor service income.  
 /b Net of "drawings" and "repayment by purchase" (IFS).  
 /c Includes borrowings by the banking system.  
 /d Excludes net use of IMF resources which are shown separately.  
 /e "International Reserves" (IFS).  
 /f ADB.  
 /g Includes bilateral ODA, Eximbanks, official export credits, including US-CCC Credits.  
 /h Other guaranteed private loans.  
 /i Private loans.  
 /j Excludes IFU.



KOREA

THE STATUS OF BANK GROUP OPERATIONS IN THE REPUBLIC OF KOREA

A. Statement of Bank Loans and IDA Credits (as of July 31, 1980)

Loan or Credit Number	Calendar Year	Borrower	Purpose	Amount (\$ million) (less cancellations)			
				Bank	TW	IDA	Undisbursed
Twenty loans and eight credits fully disbursed				725.67	40.0	106.81	
906	1973	Republic of Korea	Education II	23.0			0.35
917	1973	Republic of Korea	Ports I	80.0			0.41
953	1974	Republic of Korea	Tourism	25.0			0.16
994	1974	AFDC	Agriculture	13.0			0.04
1070	1975	Republic of Korea	Secondary Cities-Gwangju	15.0			1.85
1096	1975	Republic of Korea	Education III	22.5			2.93
1101	1975	Republic of Korea	Railways V	100.0			0.36
1193	1976	Republic of Korea	Second Integrated Dairy Dev.	15.0			0.01
1203	1976	Republic of Korea	Highways III	90.0			2.32
1319	1976	ADC	Irrigation	29.0			23.65
1338	1976	KDB II	Dev. Finance Co.	75.0			1.96
1364	1977	ADC	Irrigation	95.0			64.97
1401	1977	Republic of Korea	Ports II	67.0			57.53
1461	1977	KDFC VI	Dev. Finance Co.	70.0			0.63
1466	1977	Republic of Korea	Heavy Machinery	80.0			23.95
1474	1977	Republic of Korea	Vocational Training	23.0			12.74
1503	1978	ADC - Ogseo Stage I	Agriculture/Irrigation	36.0			35.31
1507	1978	SMIB II	Dev. Finance Co.	55.0			1.82
1530	1978	Republic of Korea	Rural Infrastructue II	95.0			54.21
1542	1978	Republic of Korea	Railway VI	120.0			28.08
1574	1978	KDB III	Dev. Finance Co.	110.0			33.46
1635	1978	KDFC VII	Dev. Finance Co.	100.0			14.16
1640	1978	Republic of Korea	Highways IV	143.0			125.40
1666	1979	Republic of Korea	Chungju Multipurpose	125.0			118.67
1676	1979	Republic of Korea	Electronics Technology	29.0			25.54
1749	1979	SMIB III	Dev. Finance Co.	60.0			36.60
1758	1979	Republic of Korea	Second Gwangju Regional	65.0			65.00
1774	1979	Republic of Korea	Population I	30.0			30.00
1778	1979	Korea Electric Co.	Power	115.0			115.00
1800	1980	Republic of Korea	Education V - Sector Loan	100.0			100.00
1829 /a	1980	CNB I	Dev. Finance Co.	30.0			30.00
1836 /b	1980	Republic of Korea	Railway VII	94.0			94.00
1851 /c	1980	AFDC	Second Agric. Prod. Process	50.0			50.00
Total				2,905.17	40.0	106.81	1,150.01
of which has been repaid				142.28	-	2.04	
Total now outstanding				2,762.89	40.0	104.8	
Amount sold				8.83			
of which has been repaid				5.95	2.88	-	-
Total now held by Bank and IDA (prior to exchange adjustment)				2,760.01	40.0	104.77	
Total undisbursed				1,150.01	-	-	1,150.01

/a Effective August 5, 1980.

/b Effective August 29, 1980.

/c Effective September 3, 1980.

B. Statement of IFC Investments (as of July 31, 1980)

Fiscal Year	Obligor	Types of Business	Amount (\$ million)		
			Loan	Equity	Total
1968	KDFC	Development Financing	-	0.7	0.7
1969	Honam Silk Co.	Textiles	1.4	0.3	1.7
1970	Atlas Paper	Pulp and paper	4.5	0.5	5.0/a
1971	Korea Investment Finance Corp.	Capital Market Development	-	0.7	0.7
1974	KDFC	Development Financing	-	0.4	0.4
1974	Korea Investment Finance Corp.	Capital Market Development	-	0.3	0.3
1975	Gold Star & Co., Ltd.	Electronic Products	16.0	1.3	17.3
1975	Korea Securities Finance Corp.	Capital Market Development	5.0	0.6	5.6
1975	Tong Yang Nylon Company, Ltd.	Synthetic Fibers	6.9	2.1	9.0
1975	Hae Un Dae Develop- ment Company, Ltd.	Tourism	2.8	0.7	3.5
1976	Korea Investment Finance Corp.	Capital Market Development	-	0.4	0.4
1976	Chungju Paper Mfg. Co.	Paper	5.0	0.5	5.5
1976	Korea Zinc Co., Ltd.	Zinc	15.0	4.0	19.0
1976	KDFC	Development Financing	17.8	-	17.8
1976	Gold Star & Co., Ltd.	Electronic Products	10.0	0.4	10.4
1977	Gold Star & Co., Ltd.	Electronic Products	-	0.2	0.2
1977	KDFC	Development Financing	-	0.3	0.3
1977	Korea Securities Finance Corp.	Capital Market	-	0.5	0.5
1977	Korea Development Leasing Corp.	Capital Market	15.0	0.4	15.4
1978	KDFC	Development Financing	-	1.1	1.1
1979	Gold Star & Co., Ltd.	Electronic Products	-	1.7	1.7
1979	KIFC	Capital Market	-	0.6	0.6
1979	Korea Development Leasing Corp.		-	0.2	0.2
1979	Gold Star & Co., Ltd.	Electronic Products	-	1.5	1.5
1980	Gold Star & Co., Ltd.	Electronic Products	-	1.8	1.8
1980	Korea Investment Finance Corp.	Capital Market	-	0.6	0.6
1980	Korea Securities Finance Corp.		-	0.8	0.8
1980	KDFC	Development Financing	-	2.2	2.2
Total gross commitment			99.4	24.8	124.2
less cancelations, terminations, repayment and sales			53.7	2.7	56.4
Total commitments now held by IFC			45.7	22.1	67.8
TOTAL undisbursed			-	-	-

/a Cancelled at the request of the Company.

PROJECTS IN EXECUTION /1

Agricultural Sector

Loan No. 994      Integrated Agricultural Products Processing Project;  
\$13.0 Million Loan of June 7, 1974; Effective Date:  
March 19, 1975; Closing Date: June 30, 1980

This project provided long-term funds to the Agriculture and Fisheries Development Corporation (AFDC) for onlending to subborrowers in the private sector for the purpose of integrating on-farm production of fruits and vegetables with modern, hygienic processing facilities, using land that was idle or underutilized. The vegetables and fruits involved are mainly asparagus, shiitake (oak mushroom), spinach, mushroom, strawberry and peach. Implementation of the project was delayed by about 18 months owing to lack of loan demand for some of the processing facilities included in the project. However, the project began progressing satisfactorily in September 1977 when the Bank approved AFDC's proposal to widen the project's scope to meet changed investor demand. Under the revised scope, AFDC will finance processing and cold storage of fish, meat, fruits and vegetables, and also fruit juice extraction and concentration and vegetable drying. Roughly \$36,500 of the loan's proceeds remained undisbursed at the Closing Date; this amount was cancelled.

Loan No. 1193      Second Integrated Dairy Development Project; \$15.0 Million  
Loan of June 4, 1976; Effective Date: November 11, 1976;  
Closing Date: December 31, 1982

The project consists of further development of 400 existing dairy farms which participated in the first project; the development of 450 new dairy farms; expansion of existing dairy processing facilities, construction of a new processing plant; and technical assistance for both farm development and processing. Effectiveness was delayed for nearly a year but implementation has progressed rapidly and the project may be completed ahead of schedule. The project will benefit 41% more farmers and supply 8% more cows than was originally estimated. Technical support to the farmers has been strengthened but more has to be done to improve pasture quality and establish a feed regime which would ensure the development of a low-cost dairy industry in Korea. The expansion of processing facilities is progressing steadily and it is anticipated that the actual capacity then

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/1 These notes are designed to inform the Executive Directors regarding the progress of projects in execution, and in particular to report any problems which are being encountered, and the action being taken to remedy them. They should be read in this sense, and with the understanding that they do not purport to present a balanced evaluation of strengths and weaknesses in project execution.

will be significantly above the original estimate. KDBC's financial condition improved during the last two years. The general prospects are for a gradually improving trend. As of July 31, 1980, the loan amount was about completely disbursed.

Loan No. 1851      Second Agricultural Products Processing Project;  
\$50 Million Loan of June 27, 1980; Effective Date:  
September 3, 1980; Closing Date: September 30, 1984;  
June 30, 1981

The project would support investments in Korea's agroprocessing subsector. Enterprises engaged in freezing and cold storage, canning, drying, pickling and other preservations of fruits, vegetables, meat and fisheries products, oil and extraction, processing of grain based foods, raw silk spinning, and production of fruit juice based beverages, dairy products, and animal feeds would be the main subborrowers. The project will benefit the farmers through widening their market opportunities, provide increased supplies, better quality and larger variety of processed food throughout the year to consumers, and create about 5,000 additional jobs. The project would also contribute to the institutional strengthening of the Agriculture and Fishery Development Corporation (AFDC).

Loan No. 1319      Miho Watershed Area Development Project; \$29.0 Million Loan  
of August 5, 1976; Effective Date: October 21, 1976;  
Closing Date: December 31, 1982

This project, located in the central region of Korea, is being financed under the first Bank loan for area development in Korea. Construction work is progressing on two of the five major civil works contracts with the first contract well advanced and providing some irrigation water this year. Altogether, the five contracts involve construction of 8 large and 19 small dams, 284 km of main and secondary canals and land development for irrigating 12,700 ha. The project also involves construction of 80 km of river channel improvement and 150 km of village access roads, as well as feasibility studies for a second stage project in the Miho Watershed. The project is currently two years behind schedule due to major shortfalls in local budget allocations.

Loan No. 1364      Yong San Gang Irrigation Project Stage II; \$95.0 Million  
Loan of February 11, 1977; Effective Date: April 22, 1977;  
Closing Date: December 31, 1984

The project will provide irrigation and land development on 20,700 ha in the lower reaches of the Yong San River. Project works include an estuary dam, sea dike, pumping stations, irrigation canals, reclamation of 5,500 ha of tidal lands, conversion of 3,250 ha of uplands for irrigation of paddy, land consolidation of 3,200 ha, and irrigation of 1,050 ha of uplands. Construction of the access roads and a portion of the estuary dam

has been completed. The main contract for estuary dam construction was awarded in December 1977, and construction is progressing well with the closure of the estuary due in March 1981, in line with the appraisal schedule. However, start of construction on the irrigation subprojects is two years behind schedule due to shortfalls in local budget allocation.

Loan No. 1503      Ogeo Area Development Project - Stage I; \$36.0 Million  
Loan of January 4, 1978; Effective Date: March 29, 1978;  
Closing Date: June 30, 1983

The project will benefit some 23,000 farm families by providing new irrigation on 7,100 ha, improved irrigation and drainage on 3,700 ha and a more assured water supply on an additional 1,500 ha. Project work consists of nine pumping stations, 190 km of main and secondary canals and land development including 5,800 ha of land consolidation, 2,500 ha of improved drainage (of which 1,500 ha would also be consolidated), 2,200 ha of tertiary irrigation and conversion of 1,800 ha of upland and forest to paddy land. Construction will be carried out under seven civil works contracts and three were awarded in late 1979. The project is currently behind schedule due to major shortfalls in local budget allocations.

Loan No. 1530      Rural Infrastructure Project II; \$95.0 Million Loan of  
March 13, 1978; Effective Date: June 8, 1978; Closing  
Date: June 30, 1983

The project includes about 46 minor irrigation, 8,300 river training and 7,400 water supply subprojects as well as a rural telephone program. The river training and rural telephones components were completed on schedule in 1979 and the water supply component will be completed in 1980. Design work on the minor irrigation component is complete. The total area of the irrigation subprojects has been finalized at 9,192 ha. Contracts have been awarded for all 36 subprojects but construction progress is slow due to shortfalls in local budget allocations.

Loan No. 1666      Chungju Multipurpose Project; \$125.0 Million Loan of  
March 29, 1979; Effective Date: July 11, 1979; Closing  
Date: June 30, 1985

The project would help meet the growing demand for municipal, industrial and irrigating water in the Han Basin for about 20 years following its completion in 1984, and would substantially reduce flood damage, generate an average of 770 million kilowatt hours annually and provide 460 MW of peaking capacity for Korea's power system. The principal features of the project are a 90 m high concrete dam across the South Han River, a power plant containing four 115 MW generating units, and associated transmission facilities; a reregulating dam about 20 km downstream of the main dam; relocation of about 100 km of roads and 10 km of railway,

protective works in the reservoir area including the raising of an existing embankment of a cement plant and other miscellaneous works; implementation of a resettlement program for some 9,300 families affected by the project; and consulting services. The major civil works contract was awarded in December 1979 and progress to date is good.

Industrial Sector

Loan No. 1338      Second Korea Development Bank Project; \$82.5 Million Loan, of which \$7.5 Million for the Korea Industrial Leasing Company, of December 23, 1976; Effective Date: March 21, 1977; Closing Date: December 31, 1980

The project provides \$75.0 million to be used by KDB to make sub-loans to finance direct imports for industrial subprojects during the period 1977-78; the remainder of the loan, \$7.5 million, was relent by KDB to its wholly-owned subsidiary, the Korea Industrial Leasing Corporation (KILC). to acquire machinery, equipment, facilities and other property to be leased to investment enterprises. Commitment of funds is progressing as expected.

Loan No. 1461      Sixth Korea Development Finance Corporation Project; \$70.0 Million Loan of June 30, 1977; Effective Date: September 15, 1977; Closing Date: December 31, 1981

The loan was made to help cover the foreign exchange requirements of industrial subprojects to be financed by KDFC subloans in 1977-78. KDFC's performance has been very satisfactory.

Loan No. 1466      Heavy Machinery Project; \$80.0 Million Loan of June 30, 1977; Effective Date: December 1, 1977; Closing Date: December 31, 1980

Project cost has increased to \$396 million as compared with the appraisal estimate of \$255 million. This is due to increases in scope to enhance the project's ability to manufacture nuclear power plant; the devaluation of the US dollar, and domestic inflation. The market prospects for the project have been affected by licensing of other power plant manufacturers in Korea. In order to deal with this problem and to strengthen the financial viability of the project, the Government intends to increase the capital base of the project sponsor and to consolidate its operations with another manufacturer. Details are being worked out between the parties involved and will be the subject of discussions between the Korean authorities and the Bank in December 1980.

Loan No. 1507      Second Medium Industry Bank Project; \$55.0 Million Loan of January 4, 1978; Effective Date: March 10, 1978; Closing Date: December 31, 1982

The project provides \$55.0 million to be used by SMIB to help cover the foreign exchange requirements of industrial subprojects. A portion of the loan - \$20.0 million - was earmarked to assist small-scale, labor-intensive subprojects creating employment at a gross capital cost per job not greater than \$6,000 or enterprises whose fixed assets are not greater than \$250,000.

Loan No. 1574      Third Korea Development Bank Project; \$110 Million Loan of June 21, 1978; Effective Date: September 14, 1978; Closing Date: December 31, 1982

The loan would be used to help cover the foreign exchange requirements of subprojects to be financed by KDB; apart from direct imports, the loan would be utilized by KDB to finance the foreign exchange component of domestically produced capital goods. An amount of up to \$10.0 million of the proceeds of the proposed loan would be made available to KDB's subsidiary, the Korea Industrial Leasing Corporation Ltd. (KILC), by way of subloans in order to finance small- and medium-sized leasing projects. Overall progress is satisfactory.

Loan No. 1635      Seventh Korea Development Finance Corporation Project; \$100.0 Million Loan of December 7, 1978; Effective Date: February 6, 1979; Closing Date: June 30, 1983

The loan was made to cover the foreign exchange requirements of subprojects to be financed by KDFC over the years 1979 and 1980. In order to support relatively labor-intensive enterprises, a component of \$20 million was earmarked for financing specifically: (a) enterprises with fixed assets not exceeding \$750,000; or (b) projects generating employment at a fixed investment cost per job not greater than \$12,500. Also, in order to finance small- and medium-sized leasing projects, an amount of up to \$10.0 million of the proceeds of the proposed loan will be made available to the Korea Development Leasing Corporation (KDLC), a leasing company affiliated to KDFC, by way of subloans.

Loan No. 1676      Electronics Technology Project; \$29.0 Million Loan of March 29, 1979; Effective Date: June 28, 1979; Closing Date: December 31, 1983

After initial delays in finalizing specifications and bidding documents for engineering, support and research equipment, the project is progressing satisfactorily. Bids have been received and are being evaluated for a major proportion of the equipment. The training program is also under way.

Loan No. 1749      Third Small and Medium Industry Bank Project; \$60 Million  
Loan of July 23, 1979; Effective Date: September 26, 1979,  
Closing Date: December 31, 1983

Apart from direct imports, the proceeds of the loan would be utilized by SMIB to finance the foreign exchange component of domestically produced capital goods. To ensure that a reasonable proportion of the loan is directed towards small, labor-intensive projects, an amount of \$25 million of the proceeds of the loan will be earmarked to finance: (a) enterprises with fixed assets not exceeding \$300,000; or (b) projects generating employment at a fixed investment cost per job not greater than \$8,500. The loan would assist SMIB in its efforts to support the Government's policy of increasing the regional dispersal of employment opportunities and of deepening the industrial structure, and also to continue SMIB support of projects which would complement large-scale manufacturing enterprises.

Loan No. 1829      Citizens National Bank (CNB); \$30 Million Loan of May 7,  
1980; Effective Date: August 5, 1980, Closing Date:  
December 31, 1984

The loan would be used to cover part of the foreign exchange requirements of subprojects to be financed by the Citizens National Bank (CNB) over a two year period, and would assist CNB in its efforts to support the Government's policy in increasing regional dispersal of employment opportunities and of deepening the industrial structure. Apart from direct imports, the proceeds of the loan would be utilized by CNB to finance the foreign exchange components of domestically produced capital goods. The project would also enable the Bank to help build up CNB's project appraisal capabilities.

#### Population Sector

Loan No. 1774      Population Project; \$30 Million Loan of December 27, 1979;  
Effective Date: March 21, 1980; Closing Date: June 30, 1984

The project will assist the Government to reduce fertility over the next five years, and simultaneously reduce infant and maternal mortality, particularly in rural areas. The project has been designed to reach out into communities with primary care services, particularly maternal and child health and family planning. The major components are: (a) improving the delivery of health and family planning services by strengthening and expanding the delivery network; (b) increasing demand for services by strengthening and expanding information, education and communication activities in health and family planning; and (c) improving the program's evaluation and administration capacities. The principal beneficiaries will be mothers and children, primarily in rural areas, who do not have access to services. It is estimated that about 10 million people would be provided primary health care services under the project, thus lowering fertility, mortality and morbidity.



Education Sector

Loan No. 906      Second Education Project; \$23.0 Million Loan and  
Credit No. 394      \$20.0 Million Credit of June 13, 1973; Effective Date:  
September 10, 1973; Closing Date: December 31, 1979

The project includes assistance for re-equipping 86 educational institutions at secondary and university levels. The Loan/Credit funds are mainly used to finance equipment. The Government is financing related civil works. Although delayed by about two years due to some project content changes and temporary halting on equipment procurement, the project has now been satisfactorily completed.

Loan No. 1096      Third Education Project; \$22.5 Million Loan of March 31,  
1975; Effective Date: June 6, 1975; Closing Date:  
June 30, 1981

The project includes assistance for extension and equipping of nine institutions (technical, agricultural and fisheries) under the Ministry of Education (MOE) and seven vocational training institutes (VTIs) under the Administrator of Labor Affairs (ALA). Project implementation is satisfactory. Physical facilities and the technical assistance program have been completed. Training operations have commenced in five VTIs. However, equipment procurement under the MOE component is delayed by almost one year because of a temporary shortage of counterpart funds. This, in turn, caused a postponement of the Closing Date by one year. Now all equipment contracts have been awarded and over 80% achieved. Estimated total project cost now slightly higher (3%) than the appraisal estimate.

Loan No. 1474      Vocational Training Project; \$23.0 Million Loan of  
July 22, 1977; Effective Date: October 25, 1977;  
Closing Date: June 30, 1982

The project includes the establishment of eight new Vocational Training Institutes (VTIs), equipment for a National Central Vocational Training Institute (NCVTI) and technical assistance to be provided by UNDP and Germany. The implementation schedule is now on schedule. All civil works contracts have been awarded. Two VTIs are now in operation and four more will be in operation in October 1980. About 80% of equipment has been awarded and about 60% delivered. All experts are in post and the fellowship program has been completed. Disbursements have improved significantly and, as of June 30, 1980, have been over 37% of the total loan. Management performance has also improved.

Loan No. 1800      Higher Technical Education; \$100.0 Million Loan of February 21, 1980; Effective Date: April 7, 1980; Closing Date: June 30, 1984

The project is the Bank's first subsector loan in education. It finances public and private institutions in higher technical education and will be approximately allocated as followed: \$60 million for engineering, \$36 million for technicians and \$4 million for technical assistance. The project include about 10 national programs for staff and curriculum development and 55 subprojects for equipment. The objectives of the project are: (a) to alleviate manpower problems, (b) to improve quality and (c) to reduce the investment gap between public and private institutions. Initial implementation of the project is satisfactory with all 10 national programs and 55 subprojects already prepared. Management capability for implementation has been strengthened with additional staff. Actual performance on teacher recruitment is about the same as planned. Enrollment increases have been restrained and the Private Institutions Promotion Act is being enacted. Disbursement has not yet started.

#### Tourism Sector

Loan No. 953      Kyongju Tourism Project; \$25.0 Million Loan of January 4, 1974; Effective Date: May 6, 1974; Closing Date: December 31, 1980

The project forms part of the first phase of the planned development of the Bomun Lake resort near Kyongju. It provides for a multipurpose dam; an irrigation system for about 1,200 ha; improvement and expansion of the water supply and sewerage and solid waste disposal systems for the city Kyongju and the resort area; installation of electrical supply and telecommunication facilities for the resort area; the construction and/or realignment of about 57 m of roads, infrastructure, including storm water drainage, environmental sanitation, community facilities, and a golf course; and a school for training hotel personnel. The first two hotels with 600 rooms were completed and opened for operation on April 1, 1978. Negotiations with other private investors are under way for a third hotel and also for apartments and restaurants in the Bomun resort area. The total amount of the loan is expected to be disbursed by the Closing Date.

#### Regional Development

Loan No. 1070      Secondary Cities Regional Project; \$15.0 Million Loan of January 15, 1975; Effective Date: August 18, 1975; Closing Date: September 30, 1980

Implementation of the Secondary Cities Regional Project has essentially been completed. Three housing sites, two access roads, a city market fishery harbor infrastructure and building complex and associated

electrical works were completed last year. Installation of refrigeration and ice handling equipment at the fishery complex which experienced some delays, has been completed; the fishery complex is fully operational. Construction of houses at all three sites has been completed and the sites are fully occupied. Yeosu Water Supply Extension Project is expected to be completed by mid-1980. After the initial delays, mainly in fulfilling conditions of effectiveness and establishing the Gwangju Regional Development Unit, the project has moved extremely well.

Loan No. 1758      Second Gwangju Regional Project; \$65.0 Million Loan of September 27, 1979; Effective Date: February 15, 1980; Closing Date: June 30, 1984

Implementation on the Second Gwangju Regional Project has started. The physical works have been divided into 15 subprojects. Civil work contracts for two subprojects (Mogpo Water Supply, and Gwangju Industrial Estate Access Road) were awarded in December 1979 and construction works are underway. Bids are being solicited for five subprojects for which detailed engineering has been completed. Consultants are expected to complete detailed designs and contract documents for other subprojects by July 1980. A detailed implementation plan for the aquaculture program has been prepared; credits will become available to aquaculture farmers beginning early next year. Preparation of Terms of Reference for various studies under Technical Assistance Program are underway. On the whole, project implementation is satisfactory. Rapid escalating in construction costs in Korea is going to cause cost overrun problems, which are being addressed.

#### Transportation Sector

Loan No. 917      Ports Project; \$80.0 Million Loan of June 27, 1973; Effective Date: September 18, 1973; Closing Date: June 30, 1980

Civil works and provision of equipment financed under the First Port Project are completed. Final estimated cost is \$143 million including \$101 million foreign exchange. The excess foreign exchange requirement over the \$80 million provided by the Bank loan is being provided by a Saudi Fund for Development loan of \$35 million to the Korean Government; this loan was based upon the revised foreign exchange requirements of \$115 million arrived at following the first large increase in the price of petroleum products. The balance of the latter loan will be spent on additional civil works which are now under way.

Loan No. 1101      Fifth Railway Project; \$100.0 Million Loan of April 10, 1975; Effective Date: July 15, 1975; Closing Date: June 30, 1980

The project will help the Korean National Railroad (KNR) continue as a major carrier of freight and passengers by providing for: the upgrading, modernization and expansion of track, rolling stock, motive power, and other equipment; the improvement of the efficiency of operation; and the strengthening of its financial position. The main components of the project are: an increase in station and line capacity and improvements in signaling; acquisition of rolling stock, diesel and electric locomotives, spare parts and repair facilities; track renewal and improvement; bridge strengthening; completion of electrification of 71 km of industrial lines; and other miscellaneous items. All contracts to be financed from the loan have been awarded and most of the equipment delivered.

Loan No. 1203      Third Highway Project; \$90.0 Million Loan of February 20, 1976; Effective Date: May 17, 1976; Closing Date: December 31, 1981

The loan provides funds to help finance: (a) the construction, chiefly on new alignments, including paving, of about 195 km of four national highways, including supervision of the work by consultants; (b) paving and improvement, chiefly on present alignments, of nine national highways totaling about 600 km, including supervision of the work by consultants; and (c) feasibility studies by consultants of about 1,200 km of national and provincial roads, to be followed by detailed engineering. All contracts for construction and paving were completed by June 1979. Feasibility studies by consultants were completed in February 1980 and a contract for detailed engineering has been negotiated. As of June 30, 1980 disbursements were over 97% of the total loan. The Saudi Fund for Development is providing a loan of \$35 million to assist in financing the project.

Loan No. 1401      Second Ports Project; \$67.0 Million Loan of April 28, 1977; Effective Date: July 27, 1977; Closing Date: December 31, 1982

The project consists of: (a) a 700 m extension of container berths being financed under the First Ports Project and a 335,000 sq m expansion of the container stacking area provided under that project with ancillary works; rehabilitation of piers 3 and 4, the central wharf, and lighter wharf No. 5; (b) procurement of container cranes, mobile container handling equipment, and tugboats; (c) Engineering Consultant Services and (d) Technical Assistance and Training. Contracts for the extension of container berths and for rehabilitation of pier No. 4 and lighter wharf No. 5 were let in July and December 1979 respectively, following delay in appointing the consultants for final engineering. Estimated costs have

increased to \$161 million (\$98 foreign exchange) compared with the appraisal estimate of \$112 (\$70 foreign exchange). KMPA expects to introduce commercial accounting from January 1, 1983. Traffic and specially containerized general cargo traffic continues to increase at Busan.

Loan No. 1542      Sixth Railway Project; \$120.0 Million Loan of April 10, 1978; Effective Date: August 3, 1978; Closing Date: June 30, 1982

The project would provide KNR with the capacity required to meet forecast traffic, and reduce operating and maintenance costs. It includes continued double tracking and electrification of lines, extension of yards and terminals, continued installation of centralized traffic control, track and rail renewal, separation of road and rail at crossings, installation of a permanent way workshop, procurement of diesel locomotives, passenger cars and freight cars, provision of a new passenger car workshop, installation of additional telecommunication and power facilities and provision of technical assistance to KNR. The loan will also finance transport sector studies. Contracts for about 98% of the equipment to be financed under the loan have been awarded and most of the equipment is under delivery. The feasibility of major investments for 1980 and 1981 has been carried out and the transport sector studies are under way.

Loan No. 1640      Fourth Highway Project; \$143.0 Million Loan of December 7, 1978; Effective Date: March 14, 1979; Closing Date: December 31, 1982

The project consists of: (a) construction and improvement, including paving and supervision by consultants, of 36 sections of national roads totaling about 950 km; (b) construction and improvement, including paving and supervision by consultants, of 10 sections of provincial roads totaling about 280 km; (c) procurement of additional road maintenance equipment for maintaining national roads; (d) a study by consultants of the institutions involved in the planning, design, maintenance, construction, administration and financing of provincial and county (gun) roads, and the preparation of a program for improving the organization and functions of such institutions, upgrading provincial and gun road maintenance and the future development of the gun road system, to be followed by detailed engineering of about 2,000 km of gun roads; and (e) provision of fellowships for training staff of the Ministry of Construction. Construction of one road was started in April 1979, and the remaining roads in September 1979 and is proceeding satisfactorily. A contract for the study was signed, and work started in September 1979. However, due to budgetary constraints, the construction work is proceeding slower than originally scheduled.

Loan No. 1836      Seventh Railway Project; \$94 Million Loan of May 21, 1980; Effective Date: August 29, 1980; Closing Date: December 12, 1983

The project focuses on the goals set jointly with Government and Bank participation on the transport sector, namely to increase the capacity of the transport system in the most economically efficient way and to develop and strengthen the institutions dealing with the transport sector. The main component of the project aims at: (a) initiating the institutional changes necessary to gradually transform the Korean National Railroad (KNR) into a public corporation; (b) providing KNR with the capacity required to meet forecast traffic; and (c) reducing operating and maintenance costs. The loan will finance rails, track maintenance equipment, breakdown cranes, passenger cars, freight cars, workshop equipment, technical assistance and training.

Power Sector

Loan No. 1778      Gojeong Power Project, \$115 Million Loan of December 27, 1979; Effective Date: March 21, 1980  
Closing Date: December 31, 1984

The project constitutes the next logical step in KECO's power development program to meet the load growth up to 1986. The project would provide for the installation of two 500 MW coal/oil-fired units and associated auxiliary equipment; coal handling and storage facilities, fuel oil tanks, ash system and storage area, a fuel unloading dock for ships up to 100,000 DWT displacement; a pumping station and a 17 km steel pipe to transport fresh water to the station; and a 160 km double circuit, 345 KV transmission line between the power station and Seoul, and related terminal substations and management consulting services. In September 1979, contracts for the main equipment which is not being financed by the Bank were signed. Effective February 1, 1980, power rates were increased on average by 36% and are now equivalent to about US10 cents a unit. This increase should enable KECO to meet its 9% rate of return objective.

KOREA

KOREA DEVELOPMENT BANK

Supplementary Project Data Sheet

Section I - Timetable of Key Events

- (a) Time taken to prepare project : The project was prepared through consultations during regular supervision of the previous loans to KDB.
- (b) Agency which prepared the project: Korea Development Bank
- (c) Date of the first Bank mission to consider the project : November 1979
- (d) Departure of appraisal mission : February 1980
- (e) Negotiations completed : October 27, 1980
- (f) Planned date of effectiveness : April 1, 1981

Section II - Special Bank Implementation Action

No specific action is considered necessary

Section III - Special Conditions

- (a) KDB will establish a special unit to monitor the performance of NIF borrowers and help conduct the NIF study (para. 44);
- (b) Financial sector studies and analysis of selected financial sector issues would be required as to form a basis of a continuing dialogue between the Government and the Bank (para. 48);
- (c) KDB will maintain a debt/equity ratio not exceeding 10:1 (para. 70);
- (d) The free-limit on individual subloans will be raised from \$2.5 million to 5 million (para. 70).
- (e) A ceiling of \$10 million would be set on the size of individual subloans (para. 70);
- (f) KDB would relend the loan proceeds at an interest rate of two percentage points over the weighted average cost of available foreign official resources (para. 71).





